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<210> 2512
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2512
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 Pro Gln Ala Ala Asp Glu Tyr Tyr Gln Leu Leu Leu Ala Leu Arg Pro
 50 55 60
 Gly Arg Val Ala Gly Leu Ala Glu Ile Val Val Asn Gly Gln Pro Phe
 65 70 75 80
 Thr Val Thr Asp Ala Thr Glu Asp Glu Leu Ala Leu Thr Ala Trp Ala
 85 90 95
 Arg Ile Leu Leu Glu Gly Thr Pro Ile Ala Met Asp Gly Ser Trp Gln
 100 105 110
 Leu His Arg Arg Arg Ala Ala Pro Glu Pro Val Arg Phe Ala Lys Arg
 115 120 125
 Phe Gly Gly Glu Gln Ser Asn Thr Ser Ile Met Val Gly Asp Ala Ile
 130 135 140
 Ile Ile Lys Met Phe Arg Arg Leu Glu Pro Gly Asp Asn Leu Asp Ile
 145 150 155 160
 Thr Val His Ser Ala Leu Asn Asp Ala Gly Ile Ser Ser Val Ala Thr
 165 170 175
 Leu Tyr Gly Phe Met Ser Gly Gln Ile Pro Ala Glu Glu His Ile Pro
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<210> 2513
 <211> 368
 <212> DNA
 <213> Homo sapiens

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<213> Homo sapiens

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Ile Gln Arg Ala Asp Asp Ile Leu Asp Leu Lys Phe Cys Met Asp Gly
35 40 45
Val Gln Thr Ala Leu Arg Ser Glu Asp Tyr Glu Gln Ala Ala Ala His
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20 25 30
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35 40 45
Ala Ala Gly Gly Leu Arg Glu Ala Thr Gln Trp Gly Ala Leu Gly Ala

50 55 60
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<210> 2517
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 <213> Homo sapiens

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 35 40 45
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 Ser Arg Lys Arg Pro Val Leu Ser Gly Gln Cys Leu Thr Pro Ala Pro
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<211> 107

<212> PRT

<213> Homo sapiens

<400> 2520

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<210> 2521

<211> 4291

<212> DNA

<213> Homo sapiens

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<210> 2522

<211> 952

<212> PRT

<213> Homo sapiens

<400> 2522

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						740									750	
Phe	Asp	Tyr	Val	Met	His	Phe	Leu	Thr	Val	Phe	Trp	Lys	Val	Leu	Phe	
						755						765				
Ala	Cys	Val	Pro	Pro	Thr	Glu	Tyr	Cys	His	Gly	Trp	Ala	Cys	Phe	Gly	
						770						780				
Val	Ser	Ile	Leu	Val	Ile	Gly	Leu	Leu	Thr	Ala	Leu	Ile	Gly	Asp	Leu	
785						790					795				800	
Ala	Ser	His	Phe	Gly	Cys	Thr	Val	Gly	Leu	Lys	Asp	Ser	Val	Asn	Ala	
						805					810				815	
Val	Val	Phe	Val	Ala	Leu	Gly	Thr	Ser	Ile	Pro	Asp	Thr	Phe	Ala	Ser	
						820									830	
Lys	Val	Ala	Ala	Leu	Gln	Asp	Gln	Cys	Ala	Asp	Ala	Ser	Ile	Gly	Asn	
						835						845				
Val	Thr	Gly	Ser	Asn	Ala	Val	Asn	Val	Phe	Leu	Gly	Leu	Gly	Val	Ala	
						850						860				
Trp	Ser</															

930 935 940
Ala Tyr Cys His Ile Arg Gly Phe
945 950

<210> 2523
<211> 392
<212> DNA
<213> Homo sapiens

<400> 2523
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60
ttcagccgaa aaattgttgg tgttgcata cgctcgacga tgcgtaccga tgcgtgccc
120
atggaggctt tggagcatgc gttaacgact gcagggcgaa ttcattgaaa ccagttaatt
180
caccatagcg atcggggcag ccagtacgtg tcaactgaagt attccaccgc gttagcggaa
240
tccggaatcc gtccgagtgt gggaacagtc ggcgattctt atgacaatgc tctagccgaa
300
acagtcaacg gtctctacaa ggcggaactg attcatgccc aaggtcctgt gacgtcggtc
360
ggagaagtcg aattggccac cttgcggnnn nn
392

<210> 2524
<211> 130
<212> PRT
<213> Homo sapiens

<400> 2524
Xaa Ile Thr Tyr Val Arg Thr Leu Ser Gly Phe Ala Tyr Thr Ala Phe
1 5 10 15
Val Val Asp Val Phe Ser Arg Lys Ile Val Gly Val Ala Thr Arg Ser
20 25 30
Thr Met Arg Thr Asp Ala Leu Pro Met Glu Ala Leu Glu His Ala Leu
35 40 45
Thr Thr Ala Gly Arg Ile His Gly Asn Gln Leu Ile His His Ser Asp
50 55 60
Arg Gly Ser Gln Tyr Val Ser Leu Lys Tyr Ser Thr Ala Leu Ala Glu
65 70 75 80
Ser Gly Ile Arg Pro Ser Val Gly Thr Val Gly Asp Ser Tyr Asp Asn
85 90 95
Ala Leu Ala Glu Thr Val Asn Gly Leu Tyr Lys Ala Glu Leu Ile His
100 105 110
Ala Gln Gly Pro Trp Thr Ser Val Gly Glu Val Glu Leu Ala Thr Leu
115 120 125
Arg Xaa
130

<210> 2525
<211> 378
<212> DNA
<213> Homo sapiens

<400> 2525

acgcgttctc gggcgagggc atcgagatt tcgaatgcac ggtgatggcg gtgtgccgca
 60
 tcccccttga atacgtgggtg ctgtcaccgc cgcgggaatc aagaaccgca cgttgcgcaa
 120
 atcgctgcgc tacgcaccaa cgtggtcggc aagatgttgg tcagcggcga gccccgnaa
 180
 tgattcatat ctccgatatc agcacgacag gggcgtcatt ccgctctgca catcggttgg
 240
 gaagtcagcg gtgcgccccgc acgcctgcga ttctgggtga agacgcgcga ctaccattca
 300
 gaactgggtgg ccgcaacact cattcgcagc gagaagcccc ccgatttgcc caacacctat
 360
 caatacggcg tggaattc
 378

<210> 2526

<211> 111

<212> PRT

<213> Homo sapiens

<400> 2526

Met	Ala	Val	Cys	Arg	Ile	Pro	Phe	Glu	Tyr	Val	Val	Leu	Ser	Pro	Pro
1			5					10				15			
Arg	Glu	Ser	Arg	Thr	Ala	Arg	Cys	Ala	Asn	Arg	Cys	Ala	Thr	His	Gln
		20				25						30			
Arg	Gly	Arg	Gln	Asp	Val	Gly	Gln	Arg	Arg	Ala	Pro	Xaa	Met	Ile	His
	35					40					45				
Ile	Ser	Asp	Ile	Ser	Thr	Thr	Gly	Ala	Ser	Phe	Arg	Ser	Ala	His	Arg
	50				55					60					
Leu	Gly	Ser	Gln	Arg	Cys	Ala	Arg	Thr	Pro	Ala	Ile	Ser	Gly	Glu	Asp
65				70				75						80	
Ala	Arg	Leu	Pro	Phe	Arg	Thr	Gly	Gly	Arg	Asn	Thr	His	Ser	Gln	Arg
			85				90							95	
Glu	Ala	Arg	Arg	Phe	Ala	Gln	His	Leu	Ser	Ile	Arg	Arg	Gly	Ile	
		100					105						110		

<210> 2527

<211> 305

<212> DNA

<213> Homo sapiens

<400> 2527

ntggtcacct tccgaatggg acggcgggccc aaacccgaga tcatggccag caaagagcag
 60
 cagatccaga gagacgacct tggagccagt ccccagagca gcagccagcc agaccacggc
 120
 cgcctctccc ccccagaagc tcccagacag cccaccatct ccacggcctc cgagacctca
 180
 gtgtacgtga cctggattcc ccgtgggaat ggtgggttcc caatccagtc cttccgtgtg
 240
 gagtacaaga agctaaagaa agtgggagac tggattctgg ccaccagcgc catcccccca
 300

cgcggt
305

<210> 2528

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2528

Xaa	Val	Thr	Phe	Arg	Met	Gly	Arg	Arg	Pro	Lys	Pro	Glu	Ile	Met	Ala
1			5						10				15		
Ser	Lys	Glu	Gln	Gln	Ile	Gln	Arg	Asp	Asp	Leu	Gly	Ala	Ser	Pro	Gln
		20					25					30			
Ser	Ser	Ser	Gln	Pro	Asp	His	Gly	Arg	Leu	Ser	Pro	Pro	Glu	Ala	Pro
	35					40					45				
Asp	Arg	Pro	Thr	Ile	Ser	Thr	Ala	Ser	Glu	Thr	Ser	Val	Tyr	Val	Thr
	50				55					60					
Trp	Ile	Pro	Arg	Gly	Asn	Gly	Gly	Phe	Pro	Ile	Gln	Ser	Phe	Arg	Val
65				70					75				80		
Glu	Tyr	Lys	Lys	Leu	Lys	Lys	Val	Gly	Asp	Trp	Ile	Leu	Ala	Thr	Ser
			85					90					95		
Ala	Ile	Pro	Pro	Arg											
			100												

<210> 2529

<211> 387

<212> DNA

<213> Homo sapiens

<400> 2529

acgcgtctcc ccggtggtggg tcccgatccc ccggccggct ctgccactga agcctctccc
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tgtgtctctcc gtgcccccccg agtggcctgc tagcccgctc tcccacacag tctccttgat
120
gtgaagtgtc acccggettgc ctgcggcggtg tctccgccgt aacacgtgta taccgggtca
180
gccatggcgg cggtctgctgg gaaggctcct gcgtatggct ttgccatccg ggacccgggc
240
tttgctctgc aggggtgggc ttctgagcag aggaaggcca gaggtaacca ggtccatgca
300
cgttttgtgc tttccacaat gtcgggcttt tatggatgct tttagtctca gtcacaaaag
360
ccatgagctc cacaggttcc tgaggga
387

<210> 2530

<211> 121

<212> PRT

<213> Homo sapiens

<400> 2530

Met	Ala	Phe	Val	Thr	Glu	Thr	Lys	Ser	Ile	His	Lys	Ser	Pro	Thr	Leu
1			5						10				15		
Trp	Lys	Asp	Thr	Asn	Val	His	Gly	Pro	Gly	Tyr	Leu	Trp	Pro	Ser	Ser

```

      20      25      30
Ala Gln Lys Pro Thr Pro Ala Glu Gln Ser Pro Gly Pro Gly Trp Gln
      35      40      45
Ser His Thr Gln Glu Pro Ser Gln Gln Pro Pro Trp Leu Ser Arg
      50      55      60
Tyr Thr Arg Val Thr Ala Glu Thr Arg Arg Ser Lys Pro Gly Asp Thr
      65      70      75      80
Ser His Gln Gly Asp Cys Val Gly Glu Arg Ala Ser Arg Pro Leu Gly
      85      90      95
Gly His Gly Gly His Arg Glu Arg Leu Gln Trp Gln Ser Arg Pro Gly
      100      105      110
Asp Arg Asp Pro Pro Arg Gly Asp Ala
      115      120

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<210> 2531

<211> 396

<212> DNA

<213> Homo sapiens

<400> 2531

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tctagagata caaaaagtac tctatacact gagagacatc tggataaata caaagggttga
60
gctttccaac cagctgaaga tgacaagact aaacccaag tcgctgcagc tctgtgtcat
120
ctcatcagca gccctggaga tgacaaagat agtgctgagg gggaacagac cttcgtcatc
180
agttaaagat atgetagctt ttctttttct tccagacatt cctgaatcca gagaactttc
240
ctgtaatgcg tcaaatcctt taggtctcaa ttctttccct agagagacaa ggagcacagt
300
tcgttcccaa ggcccccat gcttggcgag ggcgtctctg ctttcaggc agggtcctgc
360
tgcctccacc cacgtgcagg gaaaggaagg acgcgt
396

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<210> 2532

<211> 105

<212> PRT

<213> Homo sapiens

<400> 2532

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Met Thr Arg Leu Asn Pro Lys Ser Leu Gln Leu Cys Val Ile Ser Ser
  1      5      10      15
Ala Ala Leu Glu Met Thr Lys Ile Val Leu Arg Gly Asn Arg Pro Ser
      20      25      30
Ser Ser Val Lys Asp Met Leu Ala Phe Leu Phe Leu Pro Asp Ile Pro
      35      40      45
Glu Ser Arg Glu Leu Ser Cys Asn Ala Ser Asn Pro Leu Gly Leu Asn
      50      55      60
Ser Phe Pro Arg Glu Thr Arg Ser Thr Val Arg Ser Gln Gly Pro Pro
      65      70      75      80
Cys Leu Ala Arg Ala Ser Leu Leu Ser Arg Gln Gly Pro Ala Ala Ser
      85      90      95
Thr His Val Gln Gly Lys Glu Gly Arg

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100

105

<210> 2533
 <211> 495
 <212> DNA
 <213> Homo sapiens

<400> 2533
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 gctgtggcan ccccatgga cgtgatcaag tcgagactgc aggcagacgg gcagggccag
 120
 aggcgtacc ggggtctcct gcaactgtatg gtgaccagcg ttcgagagga gggaccccg
 180
 gtccctttca aggggctggt actcaattgc tgccgcgcct tccctgtcaa catggtggtc
 240
 ttcgtgcct atgaggcagt gctgaggctc gcccggggtc tgctcacata gccggtcccc
 300
 acgcccagcg gccacccac cagcagctgc tggaggtcgt agtggctgga ggaggcaagg
 360
 ggtagtgtgg ctgggttcgg gacccacag ggccattgcc caggagaatg aggagcctcc
 420
 ctgcagtgtt gtcggccgag gcctgagctc gccctgccc gctactgacc tcaggctcag
 480
 gggcccgcca gccat
 495

<210> 2534
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2534
 Xaa Arg Pro Asp Val Pro Gly Val Leu Val Ala Gly Gly Cys Ala Gly
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 Val Leu Ala Trp Ala Val Ala Xaa Pro Met Asp Val Ile Lys Ser Arg
 20 25 30
 Leu Gln Ala Asp Gly Gln Gly Gln Arg Arg Tyr Arg Gly Leu Leu His
 35 40 45
 Cys Met Val Thr Ser Val Arg Glu Glu Gly Pro Arg Val Leu Phe Lys
 50 55 60
 Gly Leu Val Leu Asn Cys Cys Arg Ala Phe Pro Val Asn Met Val Val
 65 70 75 80
 Phe Val Ala Tyr Glu Ala Val Leu Arg Leu Ala Arg Gly Leu Leu Thr
 85 90 95

<210> 2535
 <211> 1904
 <212> DNA
 <213> Homo sapiens

<400> 2535
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 60

cgtcggtggt aggcctgctac catgaggttg aatcagaaca ccttgctgct ggggaagaag
120
gtgggtccttg taccctacac ctgggagcat gtgccagca ggtaccacga gtggatgaaa
180
tcagaggagc tgcagcgttt gacagcctcg gagccgctga ccctggagca ggagtatgcc
240
atgcagtga gctggcagga agatgcagac aagtgtacct tcattgtgct ggatgccgag
300
aagtggcagg ccagccagg cgccaccgaa gagagctgca tgggtgggaga cgtgaacctc
360
ttcctcacag atctagaaga cccaccttg ggggagatcg aggtcatgat tgcagagccc
420
agctgcaggg gtaagggcct tggcactgag gccgttctcg cgatgctgtc ttacggagtg
480
accacgctag gtctgaccaa gtttgagget aaaattgggc aaggaaatga accaagcatc
540
cggatgttcc agaaacttca ctttgagcag gtggctacga gcagtgtttt tcaggaggtg
600
accctcagac tgacagttag tgagtccgag catcagtggc ttctggagca gaccagccac
660
gtggaagaga agccttacag agatgggtcg gcagagccct gctgatggct gggccttgtg
720
ggcagccact ctgtgtgagc aggggtgttg gccatacac ttcaaagacc agagccctgc
780
actgggagag tgctcctggc ccaggctggg aatcaccttt cgaggccctt cagactctgg
840
cggggccttc tgtggcctcc ctccagctag tgggtgtggc gagcagactc cagggccagg
900
gccagtcccc ttctccccct ccggccaaac ccagaccag actctaggaa gctggaatgg
960
agggcaggga tccatgggag atgtcgggat gaagggtggga gctggaggtg cagggggacc
1020
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1080
tgggagtgaa gctccaggca ctaccagctt tcttgatttt cccgtttggt ccatgtgaag
1140
agctaccacg agccccagcc tcacagtgtc cactcaaggg cagcttggtc ctcttgcct
1200
gcagaggcag gctggtgtga ccctgggaac ttgacccggg aacaacaggt ggtccagagt
1260
gagtgtggcc tggccctca acctagtgtc cgtcctctc tctcctggag ccagtcttga
1320
gtttaaaggc attagtgtta gatacagctc cttgtggctg gaaaacaccc ctctgctgat
1380
aaagctcagg gggcactgag gaagcagagg ccccttggg gtgccctcct gaagagagcg
1440
tcaggccatc agctctgtcc ctctgggtgct cccacgtctg ttctcacc ccatctctg
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1560
ggctacctgg caccctatgg cttacaaagt agagtggcc cagtttcctt ccacctgagg
1620
ggagcactct gactcctaac agtcttctt gccctgccat catctggggg ggctggctgt
1680

caagaaaggc cgggcatgct ttctaaacac agccacagga ggcttgtagg gcattctcca
 1740
 ggtggggaaa cagtcttaga taagtaaggc gacttgctta aggcctccca gcacccttga
 1800
 tcttgagatc tcacagcaga ctgcatgtga acaactggaa ccgaaaacat gcctcagtat
 1860
 aaaacaaaca ttataaaacg aaaaaaaaaa aaaaaaaaag tact
 1904

<210> 2536

<211> 207

<212> PRT

<213> Homo sapiens

<400> 2536

Met	Arg	Leu	Asn	Gln	Asn	Thr	Leu	Leu	Leu	Gly	Lys	Lys	Val	Val	Leu
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Val	Pro	Tyr	Thr	Ser	Glu	His	Val	Pro	Ser	Arg	Tyr	His	Glu	Trp	Met
			20				25					30			
Lys	Ser	Glu	Glu	Leu	Gln	Arg	Leu	Thr	Ala	Ser	Glu	Pro	Leu	Thr	Leu
		35				40					45				
Glu	Gln	Glu	Tyr	Ala	Met	Gln	Cys	Ser	Trp	Gln	Glu	Asp	Ala	Asp	Lys
	50					55				60					
Cys	Thr	Phe	Ile	Val	Leu	Asp	Ala	Glu	Lys	Trp	Gln	Ala	Gln	Pro	Gly
65				70					75					80	
Ala	Thr	Glu	Glu	Ser	Cys	Met	Val	Gly	Asp	Val	Asn	Leu	Phe	Leu	Thr
			85					90					95		
Asp	Leu	Glu	Asp	Pro	Thr	Leu	Gly	Glu	Ile	Glu	Val	Met	Ile	Ala	Glu
		100					105					110			
Pro	Ser	Cys	Arg	Gly	Lys	Gly	Leu	Gly	Thr	Glu	Ala	Val	Leu	Ala	Met
		115				120						125			
Leu	Ser	Tyr	Gly	Val	Thr	Thr	Leu	Gly	Leu	Thr	Lys	Phe	Glu	Ala	Lys
	130					135					140				
Ile	Gly	Gln	Gly	Asn	Glu	Pro	Ser	Ile	Arg	Met	Phe	Gln	Lys	Leu	His
145				150					155					160	
Phe	Glu	Gln	Val	Ala	Thr	Ser	Ser	Val	Phe	Gln	Glu	Val	Thr	Leu	Arg
			165					170					175		
Leu	Thr	Val	Ser	Glu	Ser	Glu	His	Gln	Trp	Leu	Leu	Glu	Gln	Thr	Ser
		180					185					190			
His	Val	Glu	Lys	Pro	Tyr	Arg	Asp	Gly	Ser	Ala	Glu	Pro	Cys		
		195				200					205				

<210> 2537

<211> 509

<212> DNA

<213> Homo sapiens

<400> 2537

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 120
 ccgctgctac tgtcggactc ccccgctcatt gcgtgggtggc ccttctccgg ccctgacaac
 180

ctcgctcgg accccatcgg agcccttgcg gaccgccgca tcaccgactc ggcagctgac
 240
 aaagatccgt gcaaagccct catacgccgt gcggctcacc taaccgaggg tgactccgac
 300
 ctgtgttggg ctgcgaccac cagctggaga gccctagctg cagcagcttt ggatcaacat
 360
 ccagcgaccg tcaagttcgc tcgggtagag tcagccgccg gtaatgcgcc ggcgatgctg
 420
 ctggcagcct ggctaggatt gcgtctcggc gtcccggctg agcgggtgac aaccgacgag
 480
 cccggcatct ccgcgacgt catgtcgac
 509

<210> 2538

<211> 169

<212> PRT

<213> Homo sapiens

<400> 2538

Thr	Arg	Ser	Arg	Lys	Asp	Lys	Leu	Asp	Ala	Glu	Val	His	Ala	Gly	Glu
1				5				10						15	
Gly	Thr	Pro	Gly	Asp	Val	Ile	Val	Leu	Arg	Phe	Ser	Gly	Ala	Met	Ala
			20					25					30		
Lys	Arg	Pro	Ala	Ser	Val	Ile	Leu	Pro	Leu	Leu	Leu	Ser	Asp	Ser	Pro
		35					40					45			
Val	Ile	Ala	Trp	Trp	Pro	Phe	Ser	Gly	Pro	Asp	Asn	Leu	Ala	Ser	Asp
	50					55				60					
Pro	Ile	Gly	Ala	Leu	Ala	Asp	Arg	Arg	Ile	Thr	Asp	Ser	Ala	Ala	Asp
65				70					75					80	
Lys	Asp	Pro	Cys	Lys	Ala	Leu	Ile	Arg	Arg	Ala	Ala	His	Leu	Thr	Glu
			85					90					95		
Gly	Asp	Ser	Asp	Leu	Cys	Trp	Ala	Arg	Thr	Thr	Ser	Trp	Arg	Ala	Leu
			100					105					110		
Ala	Ala	Ala	Ala	Leu	Asp	Gln	His	Pro	Ala	Thr	Val	Lys	Phe	Ala	Arg
		115					120					125			
Val	Glu	Ser	Ala	Ala	Gly	Asn	Ala	Pro	Ala	Met	Leu	Leu	Ala	Ala	Trp
	130					135				140					
Leu	Gly	Leu	Arg	Leu	Gly	Val	Pro	Val	Glu	Arg	Val	Thr	Thr	Asp	Ala
145				150					155					160	
Pro	Gly	Ile	Ser	Ala	Ile	Val	Met	Ser							
				165											

<210> 2539

<211> 453

<212> DNA

<213> Homo sapiens

<400> 2539

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 tcgcggcatg acccgaggat agtgacgtgg gacaatggct acgtgcgttt tctcaacgag
 120
 cagccgaact acgacctgac gtatgacgac gtcttcatgg caccaaaccg ttcctcggtg
 180

gggtcccgca tgaacgtcga cctcacgtca acagacgggc taggcaactcc tctgcccctc
 240
 gtagtggcca atatgaccgc aatttccgga cgtcgcatgg cagagaccat cgccaggcgc
 300
 ggaggcattg ctgttctgcc ccaagatata ccggcggatt tcgtcgcccg gtccattcgg
 360
 cgcgtcaaag atgcgcatac tcgattcgac acccagtcga ccgtcaaccc gacaacgact
 420
 gtcggtgagg ccatgaactt gctcaacaag cgc
 453

<210> 2540

<211> 134

<212> PRT

<213> Homo sapiens

<400> 2540

Phe	Ala	Ala	Ser	Arg	His	Asp	Pro	Arg	Ile	Val	Thr	Trp	Asp	Asn	Gly
1				5					10					15	
Tyr	Val	Arg	Phe	Leu	Asn	Glu	Gln	Pro	Asn	Tyr	Asp	Leu	Thr	Tyr	Asp
		20						25					30		
Asp	Val	Phe	Met	Ala	Pro	Asn	Arg	Ser	Ser	Val	Gly	Ser	Arg	Met	Asn
		35					40					45			
Val	Asp	Leu	Thr	Ser	Thr	Asp	Gly	Leu	Gly	Thr	Pro	Leu	Pro	Leu	Val
	50					55				60					
Val	Ala	Asn	Met	Thr	Ala	Ile	Ser	Gly	Arg	Arg	Met	Ala	Glu	Thr	Ile
65				70					75					80	
Ala	Arg	Arg	Gly	Gly	Ile	Ala	Val	Leu	Pro	Gln	Asp	Ile	Pro	Ala	Asp
			85					90					95		
Phe	Val	Ala	Arg	Ser	Ile	Arg	Arg	Val	Lys	Asp	Ala	His	Thr	Arg	Phe
		100						105				110			
Asp	Thr	Pro	Val	Thr	Val	Asn	Pro	Thr	Thr	Thr	Val	Gly	Glu	Ala	Met
		115					120					125			
Asn	Leu	Leu	Asn	Lys	Arg										
		130													

<210> 2541

<211> 564

<212> DNA

<213> Homo sapiens

<400> 2541

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 ccctgcatgg aaccattgc agggcacacg cagtctacat gtatcccagg ttttatgctc
 120
 acagagcctg caatactccg tgtctggaat acgttatctg ctgcacacct ccagaggaa
 180
 catgtaacgt ctgtgtaaca tgctatcctg cacacatctg aaagaatctg tgtacacaac
 240
 actattatgc tgtgcacaca tttcctcata ttctgtgtag agagcacctc attttgtact
 300
 caaatattcg gcttcataa caagttacat tgctcacatc ttaaaatatt cattacacgt
 360

gaaaccaccg catggtaccg acatccttct ggaatgtccc gcacagaggc tgatatatgt
 420
 gcacagttct cactgttctg cgtgcccagc cctcacact ggacgeccac ctcacactct
 480
 tctgccaaag gagactttgg ttctcccctt cctgtgctg gctgtgcggg ccacagtcct
 540
 ctgcacgcca gcagcatgac gcgt
 564

<210> 2542
 <211> 106
 <212> PRT
 <213> Homo sapiens

<400> 2542
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 Cys Thr Gln Ile Phe Gly Phe His Asn Lys Leu His Cys Ser His Leu
 20 25 30
 Lys Ile Phe Ile Thr Arg Glu Thr Thr Ala Trp Tyr Arg His Pro Ser
 35 40 45
 Gly Met Ser Arg Thr Glu Ala Asp Ile Cys Ala Gln Phe Ser Leu Phe
 50 55 60
 Cys Val Pro Ser Pro Ser His Trp Thr Pro Thr Ser His Ser Ser Ala
 65 70 75 80
 Lys Gly Asp Phe Gly Ser Pro Leu Pro Cys Ala Gly Cys Ala Gly His
 85 90 95
 Ser Pro Leu His Ala Ser Ser Met Thr Arg
 100 105

<210> 2543
 <211> 387
 <212> DNA
 <213> Homo sapiens

<400> 2543
 cgcctgaagg gggcggggaa aatggaatgg gggggaaggg cgcgggtggg gacatgctgg
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 aacgtgccca tgctttctgc accacactgg atgactgaag gggaaggaac gagcgtctta
 120
 ccgctcctga tgagattttt gtttttgcct aacaaagaaa tgtgtatgaa tgcacgtctg
 180
 tttgcagggg cagggaggag gagggtcctt ggaatagctg ccgacaacag ctggaactcc
 240
 tgtctgggtc cccagctgg gctagagagg gcagtgatca tctgtccact ggacaggaag
 300
 gtttgcaaag ggtgttttgc ttactgggtc ccaattttta gccttctgaa gccctgtgcc
 360
 aatggggccc agcaggcagc agtgctg
 387

<210> 2544
 <211> 122
 <212> PRT

<213> Homo sapiens

<400> 2544

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Met Glu Trp Gly Gly Arg Ala Arg Val Gly Thr Cys Trp Asn Val Pro
 1           5           10           15
Met Leu Ser Ala Pro His Trp Met Thr Glu Gly Glu Gly Thr Ser Val
 20           25           30
Leu Pro Leu Leu Met Arg Phe Leu Phe Leu Pro Asn Lys Glu Met Cys
 35           40           45
Met Asn Ala Arg Leu Phe Ala Gly Ala Gly Arg Arg Arg Val Leu Gly
 50           55           60
Ile Ala Ala Asp Asn Ser Trp Asn Ser Cys Leu Gly Pro Pro Ala Gly
 65           70           75           80
Leu Glu Arg Ala Val Ile Ile Cys Pro Leu Asp Arg Lys Val Cys Lys
 85           90           95
Gly Leu Phe Ala Tyr Trp Val Pro Ile Phe Ser Leu Leu Lys Pro Leu
100           105           110
Ser Asn Gly Ala Gln Gln Ala Ala Val Leu
115           120

```

<210> 2545

<211> 336

<212> DNA

<213> Homo sapiens

<400> 2545

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gcgattatatt tcgtgctgcc cggacttatc atggtcggct ggtggtcagg tttcccgta
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tggaccaccc tcgctatctg tctagtcggc ggcacccctcg gcgttatgta ctcgattccg
120
ctgcgtcggg cctcgtgac aggcctggat cttccctacc cggagggcgt cgcaggagct
180
gaggtgctca aagtaggcga ttccgctggt gccgccgagg ctaacaaggt gggctctgca
240
gtcatcatcg tcggttctgt ggtctctgca gcgtacgccc tggtgtcgga tottaagctt
300
gtgaagtcgg cgtgaccaa gcctttcaag acgggc
336

```

<210> 2546

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2546

```

Ala Ile Ile Phe Val Leu Pro Gly Leu Ile Met Val Gly Trp Trp Ser
 1           5           10           15
Gly Phe Pro Tyr Trp Thr Thr Leu Ala Ile Cys Leu Val Gly Gly Ile
 20           25           30
Leu Gly Val Met Tyr Ser Ile Pro Leu Arg Arg Ala Leu Val Thr Gly
 35           40           45
Ser Asp Leu Pro Tyr Pro Glu Gly Val Ala Gly Ala Glu Val Leu Lys
 50           55           60
Val Gly Asp Ser Ala Gly Ala Ala Glu Ala Asn Lys Val Gly Leu Arg

```

65 70 75 80
Val Ile Ile Val Gly Ser Val Val Ser Ala Ala Tyr Ala Leu Leu Ser
 85 90 95
Asp Leu Lys Leu Val Lys Ser Ala Leu Thr Lys Pro Phe Lys Thr Gly
 100 105 110

<210> 2547

<211> 556

<212> DNA

<213> Homo sapiens

<400> 2547

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120
tatggccaat aatattatgc ccaagctaca acattccgag tcaatcacia aggttataaa
180
cttcatttga actgaagacc acctgtaagc acgcagctca aatgtttctca cctagaaatt
240
caagtttgtt ttggaaagtg gacttaacgg tcaaagaaaa aggcctggcc aacttcagag
300
aggacacccc agccctgcta cgttgcggtg cattatgtgg tgctgtgcta tccatagaga
360
aagaggagat gaaaaagatt ctacaaagag agatcaaact gcaagaaagc acaaagattt
420
catcaccaca atatgaaggc ctccttggtg taaatgactt ttttaggtcc caataagaaa
480
taccatctat tctatctgga attattttat tagcttcaaa ttttattcta agattcatac
540
tatacatca tctaga
556

<210> 2548

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2548

Met Asn Leu Arg Ile Lys Phe Glu Ala Asn Lys Ile Ile Pro Asp Arg
1 5 10 15
Ile Asp Gly Ile Ser Tyr Trp Asp Leu Lys Lys Ser Phe Ile Pro Arg
 20 25 30
Arg Pro Ser Tyr Cys Gly Asp Glu Ile Phe Val Leu Ser Cys Ser Leu
 35 40 45
Ile Ser Leu Cys Arg Ile Phe Phe Ile Ser Ser Phe Ser Met Asp Ser
50 55 60
Thr Ala Pro His Asn Asp Thr Gln Arg Ser Arg Ala Gly Cys Pro Ser
65 70 75 80
Leu Lys Leu Ala Arg Pro Phe Ser Leu Thr Val Lys Ser Thr Phe Gln
 85 90 95
Thr Gln Leu Glu Phe Leu Gly Glu Asn Ile
 100 105

<210> 2549
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2549
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 atcgatgata atggtgtcgg catgtctcgt gaagaagcca ttacaaactt aggtacgatt
 120
 gctaaatcgg gcacctcttc tttcttagag caattgagtg gcgatcagaa aaaagacagc
 180
 caacttattg gtcaattcgg tgtaggcttt tactctgctt tcatcgttgc tgataaagta
 240
 acagtagaaa cacgtcgcgc aggtgcgacg gaaaatgaag cggttcgtg ggtatctgat
 300
 ggttctggtg aatttactat tgagacgacg gataaagcga ctcgtggtac acgcattact
 360
 ttgcatctga aagcagatga aaaagatttc gcagacaact tccgtctacg ttcattagta
 420
 acaaaaatatt ctgat
 435

<210> 2550
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2550
 Xaa Gln Pro Leu Ser Asp Arg Val Arg Ile Glu Phe Asp Lys Glu Ala
 1 5 10 15
 Asn Thr Val Val Ile Asp Asp Asn Gly Val Gly Met Ser Arg Glu Glu
 20 25 30
 Ala Ile Thr Asn Leu Gly Thr Ile Ala Lys Ser Gly Thr Ser Ser Phe
 35 40 45
 Leu Glu Gln Leu Ser Gly Asp Gln Lys Lys Asp Ser Gln Leu Ile Gly
 50 55 60
 Gln Phe Gly Val Gly Phe Tyr Ser Ala Phe Ile Val Ala Asp Lys Val
 65 70 75 80
 Thr Val Glu Thr Arg Arg Ala Gly Ala Thr Glu Asn Glu Ala Val Arg
 85 90 95
 Trp Val Ser Asp Gly Ser Gly Glu Phe Thr Ile Glu Thr Ile Asp Lys
 100 105 110
 Ala Thr Arg Gly Thr Arg Ile Thr Leu His Leu Lys Ala Asp Glu Lys
 115 120 125
 Asp Phe Ala Asp Asn Phe Arg Leu Arg Ser Leu Val Thr Lys Tyr Ser
 130 135 140
 Asp
 145

<210> 2551
 <211> 403
 <212> DNA
 <213> Homo sapiens

<400> 2551
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 60
 ggactccact tctggggacg cctgggtcgt tcgcccacca ggcctaggct acgctccatg
 120
 ctccccagc aatctctgtc tacacctcct gcgggcgctt gccctcctcc gacctcttc
 180
 cagccannaa gtccccccac cccttcagag aagcagcctc aaattccaga agtggaggct
 240
 ccagctcccc cgcgaggtac cagccccaca gtcttctggg agccattgtg gccagggacg
 300
 gcctctggac tgccaggctg ggttggggac caggaacat cggctctactc aggtgtgagg
 360
 gggcaggtct ggctgcccc aaagttggct ccatcctgga can
 403

<210> 2552
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2552
 Xaa Pro Ala Ser Leu Thr Ser Val Ser Pro Pro Arg Gly Arg Leu Ser
 1 5 10 15
 Thr Leu Asn Arg Gly Leu His Phe Trp Gly Arg Leu Val Arg Ser Pro
 20 25 30
 Thr Arg Pro Arg Leu Arg Ser Met Leu Pro Gln Gln Ser Leu Ser Thr
 35 40 45
 Pro Pro Ala Ala Pro Cys Pro Pro Pro Thr Pro Phe Gln Pro Xaa Ser
 50 55 60
 Pro Pro Thr Pro Ser Glu Lys Gln Pro Gln Ile Pro Glu Val Glu Ala
 65 70 75 80
 Pro Ala Ser Pro Arg Gly Thr Ser Pro Thr Val Phe Trp Glu Pro Leu
 85 90 95
 Trp Pro Gly Thr Ala Ser Gly Leu Pro Gly Trp Val Gly Asp Gln Gly
 100 105 110
 Thr Ser Val Tyr Ser Gly Val Arg Gly Gln Val Trp Pro Ala Pro Lys
 115 120 125
 Leu Ala Pro Ser Trp Thr
 130

<210> 2553
 <211> 380
 <212> DNA
 <213> Homo sapiens

<400> 2553
 actagtgtcc ctataagaaa aggaaaggac caagacacag gaaagatgaa gcagagattg
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 gagagataca gcatggggcca aggagcactg ggagccagca gcagctggaa gaggcaggag
 120
 gcacctctccc tagaccgcac aggatgctac tgggtgagcc tgctgtcctg gaaaaggcgt
 180

gaagtctgcc tgagtgggca ggggcttctg cgcagcacc agcaaggcca aggtggaagg
 240
 gaccctcctg gccctgtcc tggctccacc ctcagctgct ggcaggtggg tcaccaggcc
 300
 tctgccccaa gaaactcctg caggcagctc tggacccccct gtcttacaca ccttctcact
 360
 gagcctgcc gcatcccagn
 380

<210> 2554
 <211> 111
 <212> PRT
 <213> Homo sapiens

<400> 2554
 Met Lys Gln Arg Leu Glu Arg Tyr Ser Met Gly Gln Gly Ala Leu Gly
 1 5 10 15
 Ala Ser Ser Ser Trp Lys Arg Gln Glu Ala Ser Ser Leu Asp Arg Thr
 20 25 30
 Gly Cys Tyr Trp Val Ser Leu Leu Ser Trp Lys Arg Arg Glu Val Cys
 35 40 45
 Leu Ser Gly Gln Gly Leu Leu Arg Ser Thr Gln Gln Gly Gln Gly Gly
 50 55 60
 Arg Asp Pro Pro Gly Pro Cys Pro Gly Ser Thr Leu Ser Cys Trp Gln
 65 70 75 80
 Val Gly His Gln Ala Ser Ala Gln Arg Asn Ser Cys Arg Gln Leu Trp
 85 90 95
 Thr Pro Cys Leu Thr His Leu Leu Thr Glu Pro Ala Ser Ile Pro
 100 105 110

<210> 2555
 <211> 368
 <212> DNA
 <213> Homo sapiens

<400> 2555
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 120
 gataacgcga ataatggtag tgctggttcta gtgtcacag acctgggtcac ccaaatagaa
 180
 ggatttatat cctcccatat cctcattttt gtgtcgttg gcctcggcat tgtctttacc
 240
 gttgccactc gaggtgtaca gttccgcctc ttcgggcaca tgtggcacct catgtctgat
 300
 tcacggaagc aaaagggcac ctccctctcc agctctcaag cattcacagt gggctctgat
 360
 cacgcggn
 368

<210> 2556
 <211> 102
 <212> PRT

<213> Homo sapiens

<400> 2556

```

Met Leu Leu Met Leu Pro Gly Ser Ser Val Ala Phe Phe Met Gly Asn
 1             5             10             15
Ser Leu Met Gly Asp Asn Ala Asn Asn Gly Ser Val Val Leu Val Leu
      20             25             30
Thr Asp Leu Val Thr Gln Ile Glu Gly Phe Ile Ser Ser His Ile Leu
      35             40             45
Ile Phe Val Leu Val Gly Leu Gly Ile Val Phe Thr Val Ala Thr Arg
      50             55             60
Gly Val Gln Phe Arg Leu Phe Gly His Met Trp His Leu Met Leu Asp
65             70             75             80
Ser Arg Lys Gln Lys Gly Thr Ser Leu Ser Ser Ser Gln Ala Phe Thr
      85             90             95
Val Gly Leu Asp His Ala
      100

```

<210> 2557

<211> 408

<212> DNA

<213> Homo sapiens

<400> 2557

```

atcactactc cagttggtga ggcagttctg ggtcgcatct taaatgtgat cggtagagccg
60
attgatgaga tgggcccagt taacgcgaaa gaaaaatggg aaattcacccg tccagctcct
120
aaattcgaag accaagctgt taaagctgag atgttgatga ctggtattaa ggtcgttgat
180
cttcttgcac cttacgcaaa ggggtggcaag atcggctctct tcgggtggtgc gggcgtaggt
240
aaaacagttt tgattcaaga gttgattcgt aacatcgcta ctgagcacgg tggatactct
300
gtattcgtag gtgtcggcga gcgtactcgc gaaggtaacg atctttgggt tgagatgaaa
360
gaatcaggcg ttatcgcaaa gaccgcactt gtattcgggc agatgaat
408

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<210> 2558

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2558

```

Ile Thr Thr Pro Val Gly Glu Ala Val Leu Gly Arg Ile Leu Asn Val
 1             5             10             15
Ile Gly Glu Pro Ile Asp Glu Met Gly Pro Val Asn Ala Lys Glu Lys
      20             25             30
Trp Glu Ile His Arg Pro Ala Pro Lys Phe Glu Asp Gln Ala Val Lys
      35             40             45
Ala Glu Met Leu Met Thr Gly Ile Lys Val Val Asp Leu Leu Ala Pro
      50             55             60
Tyr Ala Lys Gly Gly Lys Ile Gly Leu Phe Gly Gly Ala Gly Val Gly

```

```

65          70          75          80
Lys Thr Val Leu Ile Gln Glu Leu Ile Arg Asn Ile Ala Thr Glu His
          85          90          95
Gly Gly Tyr Ser Val Phe Ala Gly Val Gly Glu Arg Thr Arg Glu Gly
          100          105          110
Asn Asp Leu Trp Val Glu Met Lys Glu Ser Gly Val Ile Ala Lys Thr
          115          120          125
Ala Leu Val Phe Gly Gln Met Asn
          130          135

```

<210> 2559

<211> 389

<212> DNA

<213> Homo sapiens

<400> 2559

```

tccttgaaga tgaacatctt tcggctgcaa actgaaaagg atttgaatcc tcagaaaaca
60
gcttttctga aagatcgact gaatgcaata caggaagagc attctaagga cctgaagctg
120
ttgcatctcg aagttatgaa ttgcgccag caactgagag ctgtaaaaga ggaagaagac
180
aaggcacaag atgaggtgca aaggttgact gccactctga agattgcctc gcagacaaag
240
aagaatgcag ccattattga agaggaactg aagaccacaa aacgtaaaat gaaccttaaa
300
attcaagagc ttctagagat gacctcattt ccaagttggt tgaagaaaat aagaacctgc
360
aggatatctt tcaacaggaa catgaagaa
389

```

<210> 2560

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2560

```

Ser Leu Lys Met Asn Ile Phe Arg Leu Gln Thr Glu Lys Asp Leu Asn
1          5          10          15
Pro Gln Lys Thr Ala Phe Leu Lys Asp Arg Leu Asn Ala Ile Gln Glu
20          25          30
Glu His Ser Lys Asp Leu Lys Leu Leu His Leu Glu Val Met Asn Leu
35          40          45
Arg Gln Gln Leu Arg Ala Val Lys Glu Glu Glu Asp Lys Ala Gln Asp
50          55          60
Glu Val Gln Arg Leu Thr Ala Thr Leu Lys Ile Ala Ser Gln Thr Lys
65          70          75          80
Lys Asn Ala Ala Ile Ile Glu Glu Glu Leu Lys Thr Thr Lys Arg Lys
85          90          95
Met Asn Leu Lys Ile Gln Glu Leu Leu Glu Met Thr Ser Phe Pro Ser
100          105          110
Trp Leu Lys Lys Ile Arg Thr Cys Arg Ile Ser Phe Asn Arg Asn Met
115          120          125
Lys

```

<210> 2561
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 2561
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 atgtggagcc atttgaacag gctcctcttc tggagcatat tttcttctgt cacttgtaga
 120
 aaagctgtat tggattgtga ggcaatgaaa acaaatgaat tcccttctcc atgtttggac
 180
 tcaaagacta aggtggttat gaagggtcaa aatgtatcta tgttttgttc ccataagaac
 240
 aaatcactgc agatcaccta ttcattgttt cgacgtaaga cacacctggg aaccaggat
 300
 ggaaaagggtg aacctgcgat ttttaacctt agcatcacag aagcccatga atcaggcccc
 360
 taaaaatgca aagcccaagt taccagctgt tcaaaataca gtcgtgactt cagcttcacg
 420
 attgtcgac
 429

<210> 2562
 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 2562
 Xaa Leu Thr Thr Val Val Leu Leu Cys Leu Leu Thr Pro Ser Trp Thr
 1 5 10 15
 Ser Thr Gly Arg Met Trp Ser His Leu Asn Arg Leu Leu Phe Trp Ser
 20 25 30
 Ile Phe Ser Ser Val Thr Cys Arg Lys Ala Val Leu Asp Cys Glu Ala
 35 40 45
 Met Lys Thr Asn Glu Phe Pro Ser Pro Cys Leu Asp Ser Lys Thr Lys
 50 55 60
 Val Val Met Lys Gly Gln Asn Val Ser Met Phe Cys Ser His Lys Asn
 65 70 75 80
 Lys Ser Leu Gln Ile Thr Tyr Ser Leu Phe Arg Arg Lys Thr His Leu
 85 90 95
 Gly Thr Gln Asp Gly Lys Gly Glu Pro Ala Ile Phe Asn Leu Ser Ile
 100 105 110
 Thr Glu Ala His Glu Ser Gly Pro Tyr Lys Cys Lys Ala Gln Val Thr
 115 120 125
 Ser Cys Ser Lys Tyr Ser Arg Asp Phe Ser Phe Thr Ile Val Asp
 130 135 140

<210> 2563
 <211> 267
 <212> DNA
 <213> Homo sapiens

ccccggccag ccagccgcca caggaactgg tgtgcctacg tggtagcccg gacagtgagc
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tgtgtccttg aggatggagt ggagacatat gtcaagtacc agccttgtgc ctggggccag
780
ccccagtgtc cccaaagcat catgtaccgc cgttcctccc gccctcgeta ccgtgtggcc
840
tacaagacag tgaccgacat ggagtggagg tgctgtcagg gttatggggg cgatgactgt
900
gctgagagtc ccgtcccagc gctggggcct gcgtcttcca caccacggcc cctggcccgg
960
cctgcccccc ccaacctctc tggctccagt gcaggcagcc cctcagtggt actggggggg
1020
gaaggctcctg gggagtcaga gaagggtgcag cagctggagg aacagggtga gagcctgacc
1080
aaggagctgc aaggcctgcg gggcgtcctg caaggactga gcgggagcct ggcagaggat
1140
gtgcagaggg ctgtggagac ggccttcaac gggaggcagc agccagctga cgcggctgcc
1200
cgccctgggg tgcataaaac cctcaatgag atccagcacc agctgcagct cctggacacc
1260
cgcgcttcca ccacgacca ggagctgggt cacctcaaca accatcatgg cggcagcagc
1320
agcagtgggg gcagcagggc ccagcccca gcctcagccc ctccggggcc cagtgaggag
1380
ctgtgcggc agctggagca gcggttgagc gagtctgtct ccgtgtgcct ggccgggcta
1440
gatggcttcc gccggcagca gcaggaggac agggagcggc tgcgagcgat ggagaagctg
1500
ctggcctcgg tggaggagcg gcaacggcac ctgcagggc tggcggtggt ccgcaggccc
1560
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1620
gatgtcgtgg ccggctcagt gacagtgtct agtgggaggc gaggcacaga gctgggagga
1680
gccgcggggc agggaggcca cccccaggc tacaccagct tggcctccc cctgtctcgc
1740
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1980
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2100
gccacgctgg agggattaca agaggttggt ggccggctcc aggatcgtgt ggatgccag
2160
gatgagacag ctgcagagtt cactactcgg ctgaatctca ctgcggcccc gctaggccaa
2220
ctggaggggc tgctgcaggc ccatggggat gagggctgtg gggcctgtgg cggagtccaa
2280

gaggaactag gccgccttcg ggatgggtgtg gagcgctgct cctgccccct gttgcctcct
2340
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2400
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2460
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2520
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2640
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2760
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3000
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3060
gggccaccag gtcctcaagg tgaacaggga gtggaggggg caccagcagc ccctgtgccc
3120
caagtggcat tttcagctc tctgagtttg ccccggtctg aaccaggcac ggtccccttc
3180
gacagagtcc tgctcaatga tggaggtat tatgatccag agacaggcgt gttcacagcg
3240
ccactggctg gacgctactt gctgagcgcg gtgctgactg ggcaccggca cgagaaagt
3300
gaggccgtgc tgtcccgctc caaccagggc gtggcccgcg tagactccgg tggctacgag
3360
cctgagggcc tggagaataa gccggtggcc gagagccagc ccagcccggg caccctgggc
3420
gtcttcagcc tcatcctgcc gctgcaggcc ggggacacgg tctgcgtcga cctggtcag
3480
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3540
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3600
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3660
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3720
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3780
cccaagaac ccctccaggg ccggcctgcg gaggagccga tctcgcacc ctccgctccc
3840
tccactggc ctccaggctg attccctggg ctccagctc ccccgcgcg gcgcgcccc
3900

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3954

<210> 2576

<211> 1016

<212> PRT

<213> Homo sapiens

<400> 2576

Met	Ala	Pro	Arg	Thr	Leu	Trp	Ser	Cys	Tyr	Leu	Cys	Cys	Leu	Leu	Thr
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Ala	Ala	Ala	Gly	Ala	Ala	Ser	Tyr	Pro	Pro	Arg	Gly	Phe	Ser	Leu	Tyr
			20					25					30		
Thr	Gly	Ser	Ser	Gly	Ala	Leu	Ser	Pro	Gly	Gly	Pro	Gln	Ala	Gln	Ile
	35						40					45			
Ala	Pro	Arg	Pro	Ala	Ser	Arg	His	Arg	Asn	Trp	Cys	Ala	Tyr	Val	Val
	50					55					60				
Thr	Arg	Thr	Val	Ser	Cys	Val	Leu	Glu	Asp	Gly	Val	Glu	Thr	Tyr	Val
65					70					75					80
Lys	Tyr	Gln	Pro	Cys	Ala	Trp	Gly	Gln	Pro	Gln	Cys	Pro	Gln	Ser	Ile
				85					90					95	
Met	Tyr	Arg	Arg	Phe	Leu	Arg	Pro	Arg	Tyr	Arg	Val	Ala	Tyr	Lys	Thr
				100				105						110	
Val	Thr	Asp	Met	Glu	Trp	Arg	Cys	Cys	Gln	Gly	Tyr	Gly	Gly	Asp	Asp
		115					120					125			
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Arg	Pro	Leu	Ala	Arg	Pro	Ala	Arg	Pro	Asn	Leu	Ser	Gly	Ser	Ser	Ala
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Gly	Ser	Pro	Leu	Ser	Gly	Leu	Gly	Gly	Glu	Gly	Pro	Gly	Glu	Ser	Glu
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Lys	Val	Gln	Gln	Leu	Glu	Glu	Gln	Val	Gln	Ser	Leu	Thr	Lys	Glu	Leu
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Gln	Gly	Leu	Arg	Gly	Val	Leu	Gln	Gly	Leu	Ser	Gly	Arg	Leu	Ala	Glu
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Asp	Val	Gln	Arg	Ala	Val	Glu	Thr	Ala	Phe	Asn	Gly	Arg	Gln	Gln	Pro
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Ala	Asp	Ala	Ala	Ala	Arg	Pro	Gly	Val	His	Glu	Thr	Leu	Asn	Glu	Ile
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Gln	His	Gln	Leu	Gln	Leu	Asp	Thr	Arg	Val	Ser	Thr	His	Asp	Gln	
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Glu	Leu	Gly	His	Leu	Asn	Asn	His	His	Gly	Gly	Ser	Ser	Ser	Ser	Gly
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Gly	Ser	Arg	Ala	Pro	Ala	Pro	Ala	Ser	Ala	Pro	Pro	Gly	Pro	Ser	Glu
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Cys	Leu	Ala	Gly	Leu	Asp	Gly	Phe	Arg	Arg	Gln	Gln	Gln	Glu	Asp	Arg
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Glu	Arg	Leu	Arg	Ala	Met	Glu	Lys	Leu	Leu	Ala	Ser	Val	Glu	Glu	Arg
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Gln	Arg	His	Leu	Ala	Gly	Leu	Ala	Val	Gly	Arg	Arg	Pro	Pro	Gln	Glu
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Cys	Cys	Ser	Pro	Glu	Leu	Gly	Arg	Arg	Leu	Ala	Glu	Leu	Glu	Arg	Arg


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Gly Gly Leu Ser His Trp Leu Pro Ala Ala Arg Gly Arg Leu Glu Gln
      435              440              445
Leu Gly Gly Leu Leu Ala Asn Val Ser Gly Glu Leu Gly Gly Arg Leu
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Asp Leu Leu Glu Glu Gln Val Ala Gly Ala Met Gln Ala Cys Gly Gln
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Leu Cys Ser Gly Ala Pro Gly Glu Gln Asp Ser Gln Val Ser Glu Ile
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Leu Ser Ala Leu Glu Arg Arg Val Leu Asp Ser Glu Gly Gln Leu Arg
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Leu Val Gly Ser Gly Leu His Thr Val Glu Ala Ala Gly Glu Ala Arg
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Asn Leu Thr Ala Ala Arg Leu Gly Gln Leu Glu Gly Leu Leu Gln Ala
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Arg His Val Ala Gly Leu Trp Ala Gly Leu Arg Glu Thr Asn Thr Thr
      755              760              765
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Ala Ala Pro Val Pro Gln Val Ala Phe Ser Ala Ala Leu Ser Leu Pro
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Arg Ser Glu Pro Gly Thr Val Pro Phe Asp Arg Val Leu Leu Asn Asp
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Gly Arg Tyr Leu Leu Ser Ala Val Leu Thr Gly His Arg His Glu Lys
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Ser Gly Gly Tyr Glu Pro Glu Gly Leu Glu Asn Lys Pro Val Ala Glu
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Ser Gln Pro Ser Pro Gly Thr Leu Gly Val Phe Ser Leu Ile Leu Pro
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Leu Gln Ala Gly Asp Thr Val Cys Val Asp Leu Val Met Gly Gln Leu
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<212> DNA
<213> Homo sapiens

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Cys Leu Leu Ser Lys Leu Arg Gly Ser Thr Gly Ala Gly Gln Thr Leu
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Leu Pro Pro Ala Gly Gln Cys Ser Leu Gly Tyr Arg Ala Leu Ser Pro
      50           55           60
Thr Val Thr Pro Glu Trp Ile Pro Ala Leu Pro Ala Leu Gly Ser Gln
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Thr Ala Thr Glu Ile Arg Asn Gln Val Lys Lys Glu Met Ile Leu Ala
      35           40           45
Lys Arg Phe Phe Phe Ile Val Phe Thr Asp Ala Leu Cys Trp Ile Pro
      50           55           60
Ile Phe Val Val Lys Phe Leu Ser Leu Leu Gln Val Glu Ile Pro Gly
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Glu	Lys	Val	Ile	Ile	Phe	Cys	Arg	Thr	Lys	Arg	Ala	Cys	Gln	Arg	Leu
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Ser	Asp	Asp	Leu	Asp	Asp	Arg	Gly	Phe	Lys	Thr	Arg	Ala	Ile	His	Gly
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Asp	Leu	Thr	Gln	Val	Ala	Arg	Glu	Lys	Ala	Leu	Lys	Lys	Phe	Arg	His
			100					105					110		
Gly	Glu	Ala	Thr	Ile	Leu	Val	Ala	Thr	Asp	Val	Ala	Ala	Arg	Gly	Ile
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Val	Arg	Val	Pro	Val	Glu	Pro	Ala	Ile	Gln	Glu	Leu	Phe	Ser	Cys	Pro
			20				25						30		
Thr	Pro	Gly	Cys	Asp	Gly	Ser	Gly	His	Val	Ser	Gly	Lys	Tyr	Ala	Arg
		35				40						45			
His	Arg	Ser	Val	Tyr	Gly	Cys	Pro	Leu	Ala	Lys	Lys	Arg	Lys	Thr	Gln
		50				55					60				
Asp	Lys	Gln	Pro	Gln	Glu	Pro	Ala	Pro	Lys	Arg	Lys	Pro	Phe	Ala	Val
65					70				75					80	
Lys	Ala	Asp	Ser	Ser	Val	Asp	Glu	Cys	Asp	Asp	Ser	Asp	Gly	Thr	
			85					90					95		
Glu	Asp	Met	Asp	Glu	Lys	Glu	Glu	Asp	Glu	Gly	Glu	Glu	Tyr	Ser	Glu
			100					105					110		
Asp	Asn	Asp	Glu	Pro	Gly	Asp	Glu	Asp	Glu	Glu	Asp	Glu	Glu	Gly	Asp

115	120	125
Arg Glu Gly Glu Glu Glu Ile Glu Glu Glu Asp Glu Asp Asp Asp Glu		
130	135	140
Asp Gly Glu Asp Val Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu		
145	150	155
Glu Glu Glu Glu Glu Glu Asn Glu Asp His Gln Met Asn Cys His		
165	170	175
Asn Thr Arg Ile Met Gln Asp Thr Glu Lys Asp Asp Asn Asn Ser Asp		
180	185	190
Glu Tyr Asp Asn Tyr Asp Glu Leu Val Ala Lys Ser Leu Leu Asn Leu		
195	200	205
Gly Lys Ile Ala Glu Asp Ala Tyr Arg Ala Arg Thr Glu Ser Glu		
210	215	220
Met Asn Ser Asn Thr Ser Asn Ser Leu Glu Asp Asp Ser Asp Lys Asn		
225	230	235
Glu Asn Leu Gly Arg Lys Ser Glu Leu Ser Leu Asp Leu Asp Ser Asp		
245	250	255
Val Val Arg Glu Thr Val Asp Ser Leu Lys Leu Leu Ala Gln Gly His		
260	265	270
Gly Val Val Leu Ser Glu Asn Met Asn Asp Arg Asn Tyr Ala Asp Ser		
275	280	285
Met Ser Gln Gln Asp Ser Arg Asn Met Asn Tyr Val Met Leu Gly Lys		
290	295	300
Pro Met Asn Asn Gly Leu Met Glu Lys Met Val Glu Glu Ser Asp Glu		
305	310	315
Glu Val Cys Leu Ser Ser Leu Glu Cys Leu Arg Asn Gln Cys Phe Asp		
325	330	335
Leu Ala Arg Lys Leu Ser Glu Thr Asn Pro Gln Glu Arg Asn Pro Gln		
340	345	350
Gln Asn Met Asn Ile Arg Gln His Val Arg Pro Glu Glu Asp Phe Pro		
355	360	365
Gly Arg Thr Pro Asp Arg Asn Tyr Ser Asp Met Leu Asn Leu Met Arg		
370	375	380
Leu Glu Glu Gln Leu Ser Pro Arg Ser Arg Val Phe Ala Ser Cys Ala		
385	390	395
Lys Glu Asp Gly Cys His Glu Arg Asp Asp Asp Thr Thr Ser Val Asn		
405	410	415
Ser Asp Arg Ser Glu Glu Val Phe Asp Met Thr Lys Gly Asn Leu Thr		
420	425	430
Leu Leu Glu Lys Ala Ile Ala Leu Glu Thr Glu Arg Ala Lys Ala Met		
435	440	445
Arg Glu Lys Met Ala Met Glu Ala Gly Arg Arg Asp Asn Met Arg Ser		
450	455	460
Tyr Glu Asp Gln Ser Pro Arg Gln Leu Pro Gly Glu Asp Arg Lys Pro		
465	470	475
Lys Ser Ser Asp Ser His Val Lys Lys Pro Tyr Tyr Gly Lys Asp Pro		
485	490	495
Ser Arg Thr Glu Lys Lys Glu Ser Lys Cys Pro Thr Pro Gly Cys Asp		
500	505	510
Gly Thr Gly His Val Thr Gly Leu Tyr Pro His His Arg Ser Leu Ser		
515	520	525
Gly Cys Pro His Lys Asp Arg Val Pro Pro Glu Ile Leu Ala Met His		
530	535	540
Glu Ser Val Leu Lys Cys Pro Thr Pro Gly Cys Thr Gly Arg Gly His		

545					550					555				560
Val	Asn	Ser	Asn	Arg	Asn	Ser	His	Arg	Ser	Leu	Ser	Gly	Cys	Pro Ile
				565					570					575
Ala	Ala	Ala	Glu	Lys	Leu	Ala	Lys	Ala	Gln	Glu	Lys	His	Gln	Ser Cys
			580					585					590	
Asp	Val	Ser	Lys	Ser	Ser	Gln	Ala	Ser	Asp	Arg	Val	Leu	Arg	Pro Met
		595				600						605		
Cys	Phe	Val	Lys	Gln	Leu	Glu	Ile	Pro	Gln	Tyr	Gly	Tyr	Arg	Asn Asn
	610					615					620			
Val	Pro	Thr	Thr	Thr	Pro	Arg	Ser	Asn	Leu	Ala	Lys	Glu	Leu	Glu Lys
625					630					635				640
Tyr	Ser	Lys	Thr	Ser	Phe	Glu	Tyr	Asn	Ser	Tyr	Asp	Asn	His	Thr Tyr
			645					650					655	
Gly	Lys	Arg	Ala	Ile	Ala	Pro	Lys	Val	Gln	Thr	Arg	Asp	Ile	Ser Pro
			660					665					670	
Lys	Gly	Tyr	Asp	Asp	Ala	Lys	Arg	Tyr	Cys	Lys	Asp	Pro	Ser	Pro Ser
	675					680						685		
Ser	Ser	Ser	Thr	Ser	Ser	Tyr	Ala	Pro	Ser	Ser	Ser	Ser	Asn	Leu Ser
	690					695					700			
Cys	Gly	Gly	Gly	Ser	Ser	Ala	Ser	Ser	Thr	Cys	Ser	Lys	Ser	Ser Phe
705					710					715				720
Asp	Tyr	Thr	His	Asp	Met	Glu	Ala	Ala	His	Met	Ala	Ala	Thr	Ala Ile
			725						730					735
Leu	Asn	Leu	Ser	Thr	Arg	Cys	Arg	Glu	Met	Pro	Gln	Asn	Leu	Ser Thr
		740						745					750	
Lys	Pro	Gln	Asp	Leu	Cys	Ala	Thr	Arg	Asn	Pro	Asp	Met	Glu	Val Asp
	755					760						765		
Glu	Asn	Gly	Thr	Leu	Asp	Leu	Ser	Met	Asn	Lys	Gln	Arg	Pro	Arg Asp
	770					775					780			
Ser	Cys	Cys	Pro	Ile	Leu	Thr	Pro	Leu	Glu	Pro	Met	Ser	Pro	Gln Gln
785					790					795				800
Gln	Ala	Val	Met	Asn	Asn	Arg	Cys	Phe	Gln	Leu	Gly	Glu	Gly	Asp Cys
			805					810						815
Trp	Asp	Leu	Pro	Val	Asp	Tyr	Thr	Lys	Met	Lys	Pro	Arg	Arg	Ile Asp
		820						825					830	
Glu	Asp	Glu	Ser	Lys	Asp	Ile	Thr	Pro	Glu	Asp	Leu	Asp	Pro	Phe Gln
	835					840						845		
Glu	Ala	Leu	Glu	Glu	Arg	Arg	Tyr	Pro	Gly	Glu	Val	Thr	Ile	Pro Ser
	850					855				860				
Pro	Lys	Pro	Lys	Tyr	Pro	Gln	Cys	Lys	Glu	Ser	Lys	Lys	Asp	Leu Ile
865					870					875				880
Thr	Leu	Ser	Gly	Cys	Pro	Leu	Ala	Asp	Lys	Ser	Ile	Arg	Ser	Met Leu
			885						890					895
Ala	Thr	Ser	Ser	Gln	Glu	Leu	Lys	Cys	Pro	Thr	Pro	Gly	Cys	Asp Gly
			900					905					910	
Ser	Gly	His	Ile	Thr	Gly	Asn	Tyr	Ala	Ser	His	Arg	Ser	Leu	Ser Gly
	915					920						925		
Cys	Pro	Arg	Ala	Lys	Lys	Ser	Gly	Ile	Arg	Ile	Ala	Gln	Ser	Lys Glu
	930					935					940			
Asp	Lys	Glu	Asp	Gln	Glu	Pro	Ile	Arg	Cys	Pro	Val	Pro	Gly	Cys Asp
945					950					955				960
Gly	Gln	Gly	His	Ile	Thr	Gly	Lys	Tyr	Ala	Ser	His	Arg	Ser	Ala Ser
			965					970						975
Gly	Cys	Pro	Leu	Ala	Ala	Lys	Arg	Gln	Lys	Asp	Gly	Tyr	Leu	Asn Gly

980 985 990
 Ser Gln Phe Ser Trp Lys Ser Val Lys Thr Glu Gly Met Ser Cys Pro
 995 1000 1005
 Thr Pro Gly Cys Asp Gly Ser Gly His Val Ser Gly Ser Phe Leu Thr
 1010 1015 1020
 His Arg Ser Leu Ser Gly Cys Pro Arg Ala Thr Ser Ala Met Lys Lys
 1025 1030 1035 1040
 Ala Lys Leu Ser Gly Glu Gln Met Leu Thr Ile Lys Gln Arg Ala Ser
 1045 1050 1055
 Asn Gly Ile Glu Asn Asp Glu Glu Ile Lys Gln Leu Asp Glu Glu Ile
 1060 1065 1070
 Lys Glu Leu Asn Glu Ser Asn Ser Gln Met Glu Ala Asp Met Ile Lys
 1075 1080 1085
 Leu Arg Thr Gln Ile Thr Thr Met Glu Ser Asn Leu Lys Thr Ile Glu
 1090 1095 1100
 Glu Glu Asn Lys Val Ile Glu Gln Gln Asn Glu Ser Leu Leu His Glu
 1105 1110 1115 1120
 Leu Ala Asn Leu Ser Gln Ser Leu Ile His Ser Leu Ala Asn Ile Gln
 1125 1130 1135
 Leu Pro His Met Asp Pro Ile Asn Glu Gln Asn Phe Asp Ala Tyr Val
 1140 1145 1150
 Thr Thr Leu Thr Glu Met Tyr Thr Asn Gln Asp Arg Tyr Gln Ser Pro
 1155 1160 1165
 Glu Asn Lys Ala Leu Leu Glu Asn Ile Lys Gln Ala Val Arg Gly Ile
 1170 1175 1180
 Gln Val
 1185

<210> 2585

<211> 542

<212> DNA

<213> Homo sapiens

<400> 2585

cactcactcc tccacagaat ttggcctcag ccagcccccac gctcagcatg cccagccctg
 60
 ccaagagccc agggatcgcc tcgctgacag accccaaaac acggggccacg ccaccccgtc
 120
 ctctaggtac ctgtgcccc agtctcaagc atcactccgt gtctccctca catgccttct
 180
 gggcctctag cctctaaaaga gctaaagtat gtgagcactt tctcagccct ttaaaccggt
 240
 taagtcatgt cactctcaca aggtgtgtgt gttttattac ctctgtttca ggtgcaagtc
 300
 atccccggga ggagtgggtg ggatgccgcc tgaccctggg ccacctggct gcagcatctg
 360
 tggtgatgac caccctctg cctcaggctt tgctcctgaa tggtcttgct ctctaggtct
 420
 gtccgctcct ggccctgctc ttcttaactc cgttcaagcc ccttgggtca cagtcctatg
 480
 ctcatcactt caatgacgcy gatgctggcg atcccccatt ctcctaattcc aagtgcagat
 540
 ct
 542

<210> 2586
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 2586
 Met Pro Ser Pro Ala Lys Ser Pro Gly Ile Ala Ser Leu Thr Asp Pro
 1 5 10 15
 Lys Thr Arg Ala Thr Pro Pro Arg Pro Leu Gly Thr Cys Ala Pro Ser
 20 25 30
 Leu Lys His His Ser Val Ser Pro Ser His Ala Phe Trp Ala Ser Ser
 35 40 45
 Pro Gln Arg Ala Lys Val Cys Glu His Phe Leu Ser Pro Leu Asn Gly
 50 55 60
 Leu Ser His Val Ile Leu Thr Arg Leu Leu Cys Phe Ile Thr Ser Val
 65 70 75 80
 Ser Gly Ala Ser His Pro Arg Glu Glu Trp Trp Gly Cys Arg Leu Thr
 85 90 95
 Leu Gly His Leu Ala Ala Ala Ser Val Leu Met Thr Thr Leu Leu Pro
 100 105 110
 Gln Ala Leu Leu Asn Val Leu Ala Leu
 115 120

<210> 2587
 <211> 435
 <212> DNA
 <213> Homo sapiens

<400> 2587
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 60
 gccacgggcg ctggagaccg catggatgag gtcataaagg aggtgccg cggttcgtaag
 120
 gatgccggct acccgccgct ggtcaccccg tgcctccaga tcgtgggaac ccaggcggtg
 180
 ttcaacgtct tgatgggcaa tgggtcgtac aagaatctca ctgccgagtt tgccgacctc
 240
 atgctcggct actacggcaa gccattggc gagctcaatc ctgagatcgt cgagatggcc
 300
 aagaagcaga ccggcaagga gccgatcgac tgccgtcccg ccgacttgct cgagcctgag
 360
 tgggatcagt tggctcgagca ggccaagagt cttgagggtc tcgacggctc cgacgaggac
 420
 gttcttacca acgcg
 435

<210> 2588
 <211> 145
 <212> PRT
 <213> Homo sapiens

<400> 2588
 Xaa Asn Ile His Ala Ala Ile Pro Gly Gly Met Leu Ser Asn Met Glu

```

      1             5             10             15
Ser  Gln  Leu  Glu  Ala  Gln  Gly  Ala  Gly  Asp  Arg  Met  Asp  Glu  Val  Met
      20             25             30
Lys  Glu  Val  Pro  Arg  Val  Arg  Lys  Asp  Ala  Gly  Tyr  Pro  Pro  Leu  Val
      35             40             45
Thr  Pro  Ser  Ser  Gln  Ile  Val  Gly  Thr  Gln  Ala  Val  Phe  Asn  Val  Leu
      50             55             60
Met  Gly  Asn  Gly  Ser  Tyr  Lys  Asn  Leu  Thr  Ala  Glu  Phe  Ala  Asp  Leu
      65             70             75             80
Met  Leu  Gly  Tyr  Tyr  Gly  Lys  Pro  Ile  Gly  Glu  Leu  Asn  Pro  Glu  Ile
      85             90             95
Val  Glu  Met  Ala  Lys  Lys  Gln  Thr  Gly  Lys  Glu  Pro  Ile  Asp  Cys  Arg
      100            105            110
Pro  Ala  Asp  Leu  Leu  Glu  Pro  Glu  Trp  Asp  Gln  Leu  Val  Glu  Gln  Ala
      115            120            125
Lys  Ser  Leu  Glu  Gly  Phe  Asp  Gly  Ser  Asp  Glu  Asp  Val  Leu  Thr  Asn
      130            135            140

```

Ala

145

<210> 2589

<211> 366

<212> DNA

<213> Homo sapiens

<400> 2589

ccggcgaaga aggacatggc catggtcttc ggcgcgaetc attacgtcga cccgacggcc

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ggcgatccgg ttgagcagat cagagcgctg accagggggc gcggcgtcga tttcgcgcatc

120

gaggtcgtcg gcatcgctga ggtcatggag caggcctact gggcgggcgc acgcggcggc

180

acgatcgtct acgtcggggc gctgggcatc gacgccaagc tggctctgcc ggccaacgac

240

ctgcacggcg gcgccaagac gatcatcggc tgcgccaacg gattggggcg agtgcgacc

300

gactatgcca agatgatctc gctggtcgag accggacggc tggacctggg cgggatgate

360

acgcgt

366

<210> 2590

<211> 122

<212> PRT

<213> Homo sapiens

<400> 2590

Pro Ala Lys Lys Asp Met Ala Met Val Phe Gly Ala Thr His Tyr Val

1

Asp Pro Thr Ala Gly Asp Pro Val Glu Gln Ile Arg Ala Leu Thr Arg

20

Gly Arg Gly Val Asp Phe Ala Ile Glu Val Val Gly Ile Val Glu Val

35

Met Glu Gln Ala Tyr Trp Ala Ala Arg Arg Gly Gly Thr Ile Val Tyr

```

      50              55              60
Val Gly Ala Leu Gly Ile Asp Ala Lys Leu Val Leu Pro Ala Asn Asp
65              70              75              80
Leu His Gly Gly Ala Lys Thr Ile Ile Gly Cys Ala Asn Gly Leu Gly
      85              90              95
Ala Val Arg Thr Asp Tyr Ala Lys Met Ile Ser Leu Val Glu Thr Gly
      100             105             110
Arg Leu Asp Leu Gly Gly Met Ile Thr Arg
      115             120

```

<210> 2591

<211> 341

<212> DNA

<213> Homo sapiens

<400> 2591

```

acgcgtaaag gcatgacctc accttatcat cagggtcaca cgtgtgttat tctggggctg
60
agcagcccac gagttgtcca gcaccaggcc aggggtcagt cagcaatgag gacagctcct
120
tcctgctcca gggcaggccc tgggcagggc aatgctgggg acacgggtggg gagtaggcca
180
cagcttctgt gggggagttc ctatggcagg aggatcatgc ccagcagcgt ggaagagcaa
240
ggggtgaccc tgcactcgag gctcctggga agacggggag gggttgaggtt acatgagggg
300
gaggggtcag ttggtgcatt cacagaacag caggggtggcc a
341

```

<210> 2592

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2592

```

Met Thr Ser Pro Tyr His Gln Gly His Thr Cys Val Ile Leu Gly Leu
 1              5              10              15
Ser Ser Pro Arg Val Val Gln His Gln Ala Arg Gly Gln Ser Ala Met
      20              25              30
Arg Thr Ala Pro Ser Cys Ser Arg Ala Gly Pro Gly Gln Gly Asn Ala
      35              40              45
Gly Asp Thr Val Gly Ser Arg Pro Gln Leu Leu Trp Gly Ser Ser Tyr
      50              55              60
Gly Arg Arg Ile Met Pro Ser Ser Val Glu Glu Gln Gly Val Thr Leu
65              70              75              80
His Ser Arg Leu Leu Gly Arg Arg Gly Gly Leu Arg Leu His Glu Gly
      85              90              95
Glu Gly Ser Val Gly Ala Phe Thr Glu Gln Gln Gly Gly
      100             105

```

<210> 2593

<211> 501

<212> DNA

<213> Homo sapiens

<400> 2593

cgcgtaaggc caccagaaga tttttatgca cagattccgt tgcttcgaga gctaatttcg
 60
 gcgctttcat ggggttttat ggaggtggat gaatatgagg cggatgatat tatcgggtacc
 120
 ttggcgcgcc aagcggatga agcgggggat tatatgactt atattgtgtc ttcggacctc
 180
 gatatgctgc aaatcgtaga tgaaaacacc aagatgtatc gaattctgcg gggattttcg
 240
 gatctcgagg agatggatag tccagcgatt gaagaaaaat atggaatctt gaagtcgcaa
 300
 tttttggacc tgaaggcgct gaagggggat aattcggata atattccagg cgtaccaggg
 360
 attggtgaga aaaccgcagt gaaactcttg aatgagtatg gtagcttgga ggggatttat
 420
 aatcatatca aggaaatttc gggggcgaca cagaagaaat tgattgctgg acgcgaatca
 480
 gctgagatgt ctcttaagct t
 501

<210> 2594

<211> 167

<212> PRT

<213> Homo sapiens

<400> 2594

Arg	Val	Arg	Pro	Pro	Glu	Asp	Phe	Tyr	Ala	Gln	Ile	Pro	Leu	Leu	Arg
1				5					10				15		
Glu	Leu	Ile	Ser	Ala	Leu	Ser	Trp	Gly	Phe	Met	Glu	Val	Asp	Glu	Tyr
			20					25					30		
Glu	Ala	Asp	Asp	Ile	Ile	Gly	Thr	Leu	Ala	Arg	Gln	Ala	Asp	Glu	Ala
		35					40					45			
Gly	Asp	Tyr	Met	Thr	Tyr	Ile	Val	Ser	Ser	Asp	Leu	Asp	Met	Leu	Gln
	50					55				60					
Ile	Val	Asp	Glu	Asn	Thr	Lys	Met	Tyr	Arg	Ile	Leu	Arg	Gly	Phe	Ser
65					70				75					80	
Asp	Leu	Glu	Glu	Met	Asp	Thr	Pro	Ala	Ile	Glu	Glu	Lys	Tyr	Gly	Ile
			85					90						95	
Leu	Lys	Ser	Gln	Phe	Leu	Asp	Leu	Lys	Ala	Leu	Lys	Gly	Asp	Asn	Ser
			100					105					110		
Asp	Asn	Ile	Pro	Gly	Val	Pro	Gly	Ile	Gly	Glu	Lys	Thr	Ala	Val	Lys
		115					120					125			
Leu	Leu	Asn	Glu	Tyr	Gly	Ser	Leu	Glu	Gly	Ile	Tyr	Asn	His	Ile	Lys
	130					135				140					
Glu	Ile	Ser	Gly	Ala	Thr	Gln	Lys	Lys	Leu	Ile	Ala	Gly	Arg	Glu	Ser
145					150				155						160
Ala	Glu	Met	Ser	Leu	Lys	Leu									
					165										

<210> 2595

<211> 928

<212> DNA

<213> Homo sapiens

<400> 2595
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 60
 cccccccag ggatacctgt aatacctgct tcccacttca tgggctacaa tctcatgctg
 120
 gtcacaattt ctggggctca ctcatataac accaacaaat gggatatttg tgaagaactt
 180
 cgcctgcggg agcttgaaga agtcaaggcc agagctgctc agatggaaaa gaccatgcgg
 240
 tgggtggcgg actgcactgc caactggaga gaaaaatgga gtaaagtctg agctgaaagg
 300
 aacagtgcgg gaaaggaagg aagacaactc agaataaaac tagagatggc gatgaaagaa
 360
 tcggatccac tgaacacagaa acagagtttg ccacttcaga aggaggcatt agaagctaat
 420
 gttacccagg atctgaagct tcctggcttc gtagaagaat cctgtgaaca tacagaccaa
 480
 tttcaattga gttcacaaat gcatgagtct atcagagagt atttggtaaa aagacaattt
 540
 tctacaaagg aggacacaaa taataaggaa caagggtggtg ttattgattc tctaaaatta
 600
 agtgaggaga tgaagcccaa tctagatggt gttgatttat tcaacaatgg tgggtctgga
 660
 aacggtgaaa cgaaaactgg gctgagactg aaagcaataa atctgccttt ggaaaatgaa
 720
 gtaactgaaa tttcagcttt gcagggtgcat ttggatgaat tccaaaaaat cttatggaag
 780
 gaaagagaaa tgcgcacagc tttggaaaaa gaaatagaga gactggagtc ggctttgtct
 840
 ctgtggaagt ggaagtatga agaactgaaa gaatcaaagc caaaaaatgt gaaagagttt
 900
 gacattcttc ttggtcaaca taatgatg
 928

<210> 2596
 <211> 309
 <212> PRT
 <213> Homo sapiens

<400> 2596
 Arg Ser Ser Arg Cys Asn Asn Asp Gln Leu Arg His Ala Ala Thr Trp
 1 5 10 15
 Trp Pro Leu Pro His Pro Pro Gly Ile Pro Val Ile Pro Ala Ser His
 20 25 30
 Phe Met Gly Tyr Asn Leu Met Leu Val Thr Ile Ser Gly Ala His Ser
 35 40 45
 Tyr Asn Thr Asn Lys Trp Asp Ile Cys Glu Glu Leu Arg Leu Arg Glu
 50 55 60
 Leu Glu Glu Val Lys Ala Arg Ala Ala Gln Met Glu Lys Thr Met Arg
 65 70 75 80
 Trp Trp Ser Asp Cys Thr Ala Asn Trp Arg Glu Lys Trp Ser Lys Val
 85 90 95
 Arg Ala Glu Arg Asn Ser Ala Gly Lys Glu Gly Arg Gln Leu Arg Ile

```

      100      105      110
Lys Leu Glu Met Ala Met Lys Glu Ser Asp Pro Leu Lys Gln Lys Gln
      115      120      125
Ser Leu Pro Leu Gln Lys Glu Ala Leu Glu Ala Asn Val Thr Gln Asp
      130      135      140
Leu Lys Leu Pro Gly Phe Val Glu Glu Ser Cys Glu His Thr Asp Gln
145      150      155      160
Phe Gln Leu Ser Ser Gln Met His Glu Ser Ile Arg Glu Tyr Leu Val
      165      170      175
Lys Arg Gln Phe Ser Thr Lys Glu Asp Thr Asn Asn Lys Glu Gln Gly
      180      185      190
Val Val Ile Asp Ser Leu Lys Leu Ser Glu Glu Met Lys Pro Asn Leu
      195      200      205
Asp Gly Val Asp Leu Phe Asn Asn Gly Gly Ser Gly Asn Gly Glu Thr
      210      215      220
Lys Thr Gly Leu Arg Leu Lys Ala Ile Asn Leu Pro Leu Glu Asn Glu
225      230      235      240
Val Thr Glu Ile Ser Ala Leu Gln Val His Leu Asp Glu Phe Gln Lys
      245      250      255
Ile Leu Trp Lys Glu Arg Glu Met Arg Thr Ala Leu Glu Lys Glu Ile
      260      265      270
Glu Arg Leu Glu Ser Ala Leu Ser Leu Trp Lys Trp Lys Tyr Glu Glu
      275      280      285
Leu Lys Glu Ser Lys Pro Lys Asn Val Lys Glu Phe Asp Ile Leu Leu
      290      295      300
Gly Gln His Asn Asp
305

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<210> 2597

<211> 631

<212> DNA

<213> Homo sapiens

<400> 2597

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ccatgggtgg gaatgcaaga gacacactct agacttacta gaggagcaag agcaggactt
60
ggctgcacct gcagctgagg gttagcagga attaggagat aacagtagaa tagggctaga
120
ctgaaaaggc ctttgatgcc aggttaggaa atttacattt tatccacaaa atccaaatcc
180
tcctttaata atgagatgtc tttaacaagt tttgggcaag agtgggtatgg ctgacctggt
240
gtcctgggaa ggaactgtgt ggggatggtg tgcaggactt acctagggtg ggaaaggcac
300
aagcagcatg gggctgtggc agctaccaga ggtaaaggga catttcaggg aaagacttgg
360
caggacaaga ccttccttgg atggatggat gaataccaga aacagggacc caagagaaaag
420
gccgagtttc atagggagag aagatgggtc atgtatgagg catgttgagc ttgtactgat
480
ggtagacgt ccagtcgaca gtactacca ctggccagtg agaaatgtgg gaccaggggtt
540
caggaggaaa ctggggccgg aaatgagcat ttggaaggcg ccagggtgga agcgggtggt
600

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tcactccacg agtgctatatt cacttacgcg t
631

<210> 2598

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2598

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Met Gly Leu Trp Gln Leu Pro Glu Val Lys Gly His Phe Arg Glu Arg
 1           5           10          15
Leu Gly Arg Thr Arg Pro Ser Leu Asp Gly Trp Met Asn Thr Arg Asn
 20          25          30
Arg Asp Pro Arg Glu Arg Pro Ser Phe Ile Gly Arg Glu Asp Gly Ser
 35          40          45
Cys Met Arg His Val Glu Leu Val Leu Met Val Arg Arg Pro Val Asp
 50          55          60
Ser Thr Thr His Trp Pro Val Arg Asn Val Gly Pro Gly Phe Arg Arg
 65          70          75          80
Lys Leu Gly Pro Glu Met Ser Ile Trp Lys Ala Pro Gly Trp Lys Arg
 85          90          95
Val Val His Ser Thr Ser Ala Ile Ser Leu Thr Arg
100          105
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<210> 2599

<211> 356

<212> DNA

<213> Homo sapiens

<400> 2599

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nagatcttat acagggacgt gatgttgagg aactactgga accttggttc tctgggactg
60
tgtcattttg atatgaatat tatctccatg ttggaggaag ggaaagagcc ctggactgtg
120
aagagctgtg tgaaaatagc aagaaaacca agaacgcggg aatgtgtcaa aggcgtggtc
180
acagatatcc ctcttaaagt tacaatcaag gatttgctac caaaagagaa gagcagtaca
240
gaagcagtat tccacacagt ggtgttggaag agacacgaaa gccctgacat tgaagacttt
300
tccttcaagg aaccccgaga aaatgtgcat gattttgagt gtcaatggag agatgn
356
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<210> 2600

<211> 118

<212> PRT

<213> Homo sapiens

<400> 2600

```
Xaa Ile Leu Tyr Arg Asp Val Met Leu Glu Asn Tyr Trp Asn Leu Val
 1           5           10          15
Ser Leu Gly Leu Cys His Phe Asp Met Asn Ile Ile Ser Met Leu Glu
 20          25          30
Glu Gly Lys Glu Pro Trp Thr Val Lys Ser Cys Val Lys Ile Ala Arg
```

```

      35          40          45
Lys Pro Arg Thr Arg Glu Cys Val Lys Gly Val Val Thr Asp Ile Pro
      50          55          60
Pro Lys Cys Thr Ile Lys Asp Leu Leu Pro Lys Glu Lys Ser Ser Thr
65      70      75      80
Glu Ala Val Phe His Thr Val Val Leu Glu Arg His Glu Ser Pro Asp
      85      90      95
Ile Glu Asp Phe Ser Phe Lys Glu Pro Gln Lys Asn Val His Asp Phe
      100      105      110
Glu Cys Gln Trp Arg Asp
      115

```

<210> 2601
 <211> 329
 <212> DNA
 <213> Homo sapiens

```

<400> 2601
gcgcgatca tgatctacgg cgacgacgtc acccacctgc tcaccgaaga aggcacgccc
60
tacttggtaca aggcgcgttc cctggaagag cgccaagcga tgatcgccgg cggtggtggg
120
gtcacgcct tcggttgcg ccacaacccc aaggacactg cgcgcatgcg ccgcgaaggc
180
ttgatgcct tgccgaaga cctcggtatc cgccgcaccg acgccaccgc cgaactgttg
240
gccgccaaga gcgtggccga cctggtggag tggtcgggtg gcttgtgcaa cccgcccgcc
300
aagttcagga gctggtaaat gcgcgccct
329

```

<210> 2602
 <211> 105
 <212> PRT
 <213> Homo sapiens

```

<400> 2602
Ala Pro Ile Met Ile Tyr Gly Asp Asp Val Thr His Leu Leu Thr Glu
1      5      10      15
Glu Gly Ile Ala Tyr Leu Tyr Lys Ala Arg Ser Leu Glu Glu Arg Gln
      20      25      30
Ala Met Ile Ala Gly Gly Gly Gly Val Thr Ala Phe Gly Leu Arg His
      35      40      45
Asn Pro Lys Asp Thr Ala Arg Met Arg Arg Glu Gly Leu Ile Ala Leu
      50      55      60
Pro Glu Asp Leu Gly Ile Arg Arg Thr Asp Ala Thr Arg Glu Leu Leu
65      70      75      80
Ala Ala Lys Ser Val Ala Asp Leu Val Glu Trp Ser Gly Gly Leu Cys
      85      90      95
Asn Pro Pro Ala Lys Phe Arg Ser Trp
      100      105

```

<210> 2603
 <211> 423

<212> DNA

<213> Homo sapiens

<400> 2603

tcatgatcca ttgctctacc ctttacgggt gtgcacctac gcccagggtcg gtggtcagga
 60
 gcatcggttc ggtgggtaccg aggtcgagga cttccttcac gccgttggtc gcggagggca
 120
 ggttggtgta agtggtcagg tgggccacga tctgggcaact gatcacctcg gtgaaatcga
 180
 agctctgggt accctgagcg gtcgccgaca cgacacgggtc cacaccggag accagaccga
 240
 tctcggagat gatcgcgtaa ctttcattgt cgtagaggat cttgcacgca tcgatgatgc
 300
 gcttgatctc cttggcagtg aagatgattt ccatcggggt gttggccgac agatactgac
 360
 cggagctggg ggtcacctgg gtggaatcca ggtcatccgg aaccgggttc aggttggtccg
 420
 cgg
 423

<210> 2604

<211> 103

<212> PRT

<213> Homo sapiens

<400> 2604

Met	Glu	Ile	Ile	Phe	Thr	Ala	Lys	Glu	Ile	Lys	Arg	Ile	Ile	Asp	Ala
1				5					10					15	
Cys	Lys	Ile	Leu	Tyr	Asp	Asn	Glu	Gly	Tyr	Ala	Ile	Ile	Ser	Glu	Ile
			20					25					30		
Gly	Leu	Val	Ser	Gly	Val	Asp	Arg	Val	Val	Ser	Ala	Thr	Ala	Gln	Gly
		35				40					45				
Asn	Gln	Ser	Phe	Asp	Phe	Thr	Glu	Val	Ile	Ser	Ala	Gln	Ile	Val	Ala
		50				55					60				
His	Leu	Thr	Thr	Tyr	His	Asn	Leu	Pro	Ser	Ala	Asn	Asn	Gly	Val	Lys
65				70					75				80		
Glu	Val	Leu	Asp	Leu	Gly	Thr	Thr	Glu	Pro	Met	Leu	Leu	Thr	Thr	Asp
			85					90					95		
Leu	Gly	Val	Gly	Ala	Gln	Pro									
			100												

<210> 2605

<211> 354

<212> DNA

<213> Homo sapiens

<400> 2605

ngggaggagg ggcattgtcaa aagcgactgt atccagaggg ttgtatttaa acatttttca
 60
 aaacatatgt ggcaaacagc ggggggaggg gatctcacca acgtttttct ccactttctc
 120
 tttgcatgct gggacctgtt ccactttcaa aatgtgtcat tttggaagga aaggaggagaa
 180

caactacttg aaaggaatac acgtcagtat gagccctttc tcctcagcag aaggttgccc
240
caaagtacct cctctgaggc gagagaaagg agagaggagg agagacagct ttcacaaat
300
ggggcaccca ggactctagg gagagaggca cgttctcaca aaggcccttt gage
354

<210> 2606

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2606

Met	Ser	Lys	Ala	Thr	Val	Ser	Arg	Gly	Phe	Asp	Leu	Asn	Ile	Phe	Gln
1				5					10					15	
Asn	Ile	Cys	Gly	Lys	Gln	Arg	Gly	Glu	Gly	Ile	Ser	Pro	Thr	Phe	Phe
		20					25						30		
Ser	Thr	Ser	Ser	Leu	His	Ala	Gly	Thr	Cys	Ser	Thr	Phe	Lys	Met	Cys
		35					40					45			
His	Phe	Gly	Arg	Lys	Gly	Arg	Asn	Asn	Tyr	Leu	Lys	Gly	Ile	His	Val
	50					55					60				
Ser	Met	Ser	Pro	Phe	Ser	Ala	Glu	Gly	Cys	Pro	Lys	Val	Pro	Pro	
65					70				75					80	
Leu	Arg	Arg	Glu	Lys	Gly	Glu	Arg	Arg	Arg	Asp	Ser	Phe	His	Gln	Met
				85					90					95	
Gly	His	Pro	Gly	Leu											
				100											

<210> 2607

<211> 297

<212> DNA

<213> Homo sapiens

<400> 2607

tgatcaagaa caatgatacg atatcctaac caacagagga agcaacggaa gttgttggtg
60
tttttatgct gttttttttt tttgagaacg gatcttgccc ctgccccccag gccggaatgg
120
atgacatgga cagaacccccg tcggaaaaaa gccggaatgt gcaaacccaa attcccacca
180
cacggggggcc ctaacaattg gatccatccc cnaaaaaanc cntnncaaaa aaagntaaaa
240
actttttttt ttttaaanmn anacccccaa aaaaaccaa aaaaaaaatt taaaaaa
297

<210> 2608

<211> 95

<212> PRT

<213> Homo sapiens

<400> 2608

Met	Ile	Arg	Tyr	Pro	Asn	Gln	Gln	Arg	Lys	Gln	Arg	Lys	Leu	Leu	Leu
1				5					10				15		
Phe	Leu	Cys	Cys	Phe	Phe	Phe	Leu	Arg	Thr	Asp	Leu	Ala	Pro	Ala	Pro

			20					25					30				
Arg	Pro	Glu	Trp	Met	Thr	Trp	Thr	Glu	Pro	Arg	Arg	Lys	Lys	Ala	Gly		
		35						40					45				
Met	Cys	Lys	Pro	Lys	Phe	Pro	Pro	His	Gly	Gly	Pro	Asn	Asn	Trp	Ile		
		50				55					60						
His	Pro	Xaa	Lys	Xaa	Pro	Xaa	Gln	Lys	Lys	Xaa	Lys	Thr	Phe	Phe	Phe		
65					70					75						80	
Leu	Xaa	Xaa	Xaa	Pro	Gln	Lys	Asn	Gln	Lys	Lys	Lys	Phe	Lys	Lys			
				85					90					95			

```
<210> 2609
<211> 305
<212> DNA
<213> Homo sapiens
```

```

<400> 2609
ncgccatcg  catgatgtca ggcaaagatg atcctggcat ggcaaaggta tacggttttg
60
ttgacaagtc cctgacgata cctatccgct catctggaga cccatgcggt ccttggaccc
120
caattgccta cgaaaaaatt ttttttttcc cccccaaaaa acaccccccc ctgcgcatcg
180
tgaaagtctt acctcggggg cgtcatctcg gctgtcatcg tcggcaaata actcagctgg
240
cgtaccctt cgtcatcgcc cgggccaccg acctcgacgg cncagcgtgc acggcaacga
300
ccacc
305

```

```
<210> 2610
<211> 98
<212> PRT
<213> Homo sapiens
```

[illegible]

```
<210> 2611
<211> 342
<212> DNA
<213> Homo sapiens
```

<400> 2611
 gccgccgga tcgacggcga ctctctgacc agctgggtgt ccagctcgct gcaaaccgct
 60
 gtggggcaat ggcttcaggt ggacttcgac catccggtga ccaacgcgac catcacctg
 120
 acgcccagcg ccaccgtgtg cggagctcag gtgcgccgcy tcgaggtggc aacagccaac
 180
 ggcaccagca caattcgctt cgaccagccc ggcaagccgc tgacggcggc gctgccttac
 240
 ggcgagacct catgggtccg gttcaccgcy accggcaccg acgacggctc ccccggcgtg
 300
 cagttcggca tcaccgactt ctccgtgacg cagtacgacg cg
 342

<210> 2612
 <211> 114
 <212> PRT
 <213> Homo sapiens

<400> 2612
 Ala Ala Ala Ile Asp Gly Asp Ser Ser Thr Ser Trp Val Ser Ser Ser
 1 5 10 15
 Leu Gln Thr Ala Val Gly Gln Trp Leu Gln Val Asp Phe Asp His Pro
 20 25 30
 Val Thr Asn Ala Thr Ile Thr Leu Thr Pro Ser Ala Thr Ala Val Gly
 35 40 45
 Ala Gln Val Arg Arg Val Glu Val Ala Thr Ala Asn Gly Thr Ser Thr
 50 55 60
 Ile Arg Phe Asp Gln Pro Gly Lys Pro Leu Thr Ala Ala Leu Pro Tyr
 65 70 75 80
 Gly Glu Thr Ser Trp Val Arg Phe Thr Ala Thr Gly Thr Asp Asp Gly
 85 90 95
 Ser Pro Gly Val Gln Phe Gly Ile Thr Asp Phe Ser Val Thr Gln Tyr
 100 105 110
 Asp Ala

<210> 2613
 <211> 414
 <212> DNA
 <213> Homo sapiens

<400> 2613
 acgcgtgtgg gttgtgcaca gggcatggct gctctggaca ggccctgggcc ctgggcatca
 60
 ttctcctcct ccaaaagggtg agggctctgac ctaatggtac ttgtctgat gttttccaga
 120
 tatgccctta ctgggaaggc ccaagtgggc aggcagagtc tggggtggag cgaggtgggg
 180
 ctgggaagca ctctgctttt tctgctgccc cagaacgaat gcaagttctg gcagcttctc
 240
 ctctcctcgg gaggaggaaa ggagggtctg cctccaggtc tcaggctgag ggagtgggct
 300

ggagaccctc tagatggcca gcagaggctg gcctctgtga gaaggcttcc ttgcgtgact
 360
 ctggggccccc tcccaggctc tcctcgtggc aggcagggac ttggggccagc atgg
 414

<210> 2614
 <211> 107
 <212> PRT
 <213> Homo sapiens

<400> 2614
 Met Val Leu Cys Leu Met Phe Ser Arg Tyr Ala Pro Thr Gly Lys Gly
 1 5 10 15
 Gln Val Gly Arg Gln Ser Leu Gly Trp Ser Glu Val Gly Leu Gly Ser
 20 25 30
 Thr Pro Ala Phe Leu Leu Pro Gln Asn Glu Cys Lys Phe Trp Gln Leu
 35 40 45
 Leu Leu Leu Leu Gly Gly Gly Lys Glu Gly Ser Pro Pro Gly Leu Arg
 50 55 60
 Leu Arg Glu Trp Ala Gly Asp Pro Leu Asp Gly Gln Gln Arg Leu Ala
 65 70 75 80
 Ser Val Arg Arg Leu Pro Cys Val Thr Leu Gly Pro Leu Pro Gly Ser
 85 90 95
 Pro Arg Gly Arg Gln Gly Leu Gly Pro Ala Trp
 100 105

<210> 2615
 <211> 394
 <212> DNA
 <213> Homo sapiens

<400> 2615
 nnngccgccc ccctcgcccg cagcgcgctt cttttgcgcn ncgacgtcag ccagaaggcg
 60
 gacgtcgacg ccattgctgaa ggaaacgctg gccagttcg gccacatcga tatectcgtc
 120
 aacaatgcgg gcgtcacgca tgcggccgat ttctcgcagc tgtgcgaaga cgatttcgac
 180
 cgggtcatgc gcattaacct gaaatcgatg ttctgtgcg gccaggccgc ggcgcgcgag
 240
 atggtcaagc gcaacagcgg ctgcatcatc aacatgtcca gcgtgaatgc ggaactggcc
 300
 attccgaacc aggtgccgta cgtggtgtcg aaaggcgcca tcaaccagct gaccaaggtc
 360
 atggccttga acctggcgcc gcacgggtcg cgct
 394

<210> 2616
 <211> 131
 <212> PRT
 <213> Homo sapiens

<400> 2616
 Xaa Ala Ala Ala Leu Gly Arg Ser Ala Leu Leu Leu Arg Xaa Asp Val

```

      1             5             10             15
Ser  Gln  Lys  Ala  Asp  Val  Asp  Ala  Met  Leu  Lys  Glu  Thr  Leu  Ala  Gln
      20             25             30
Phe  Gly  His  Ile  Asp  Ile  Leu  Val  Asn  Asn  Ala  Gly  Val  Thr  His  Ala
      35             40             45
Ala  Asp  Phe  Leu  Asp  Val  Cys  Glu  Asp  Asp  Phe  Asp  Arg  Val  Met  Arg
      50             55             60
Ile  Asn  Leu  Lys  Ser  Met  Phe  Leu  Cys  Gly  Gln  Ala  Ala  Ala  Arg  Glu
      65             70             75             80
Met  Val  Lys  Arg  Asn  Ser  Gly  Cys  Ile  Ile  Asn  Met  Ser  Ser  Val  Asn
      85             90             95
Ala  Glu  Leu  Ala  Ile  Pro  Asn  Gln  Val  Pro  Tyr  Val  Val  Ser  Lys  Gly
      100            105            110
Ala  Ile  Asn  Gln  Leu  Thr  Lys  Val  Met  Ala  Leu  Asn  Leu  Ala  Pro  His
      115            120            125
Gly  Ala  Arg
      130

```

<210> 2617
 <211> 513
 <212> DNA
 <213> Homo sapiens

```

<400> 2617
naccggttgg catcatgctc acagcactgg ggggtccctt cttcttttc ctcctcagaa
60
agacattgtg agatgggaaa tatcatggaa acacctatac tttccggctc ccacttgaac
120
gtcaccttgg gaaatcacia gattctcaat gacgtctcgc tatcattcca agcgggagtt
180
atgcacgcca tacttggccc caacggttct gggaagacca ccctggtacg caggttatgc
240
ggagccctct ccccgagtc ggggagcgtc aaattcgatg gaacggatct atccacgatg
300
tcgcatacct gtatcgcgcg tcgtattgcg atcgtctggc agagcgcgac cgctccctct
360
gacctaccg tacgtcacct cgttggctac gggagatatg cccacacacc gtggtggcag
420
ataagggaca ccagcgccga cagccatgtg gaacaagcaa tggagctggc cgatgtcacg
480
tgcttcgceg atcgacgcgt caccactctc tca
513

```

<210> 2618
 <211> 171
 <212> PRT
 <213> Homo sapiens

```

<400> 2618
Xaa  Arg  Leu  Ala  Ser  Cys  Ser  Gln  His  Trp  Gly  Phe  Pro  Ser  Phe  Phe
      1             5             10             15
Ser  Ser  Ser  Glu  Arg  His  Cys  Glu  Met  Gly  Asn  Ile  Met  Glu  Thr  Pro
      20             25             30
Ile  Leu  Ser  Gly  Ser  His  Leu  Asn  Val  Thr  Leu  Gly  Asn  His  Lys  Ile

```

```

      35              40              45
Leu Asn Asp Val Ser Val Ser Phe Gln Ala Gly Val Met His Ala Ile
  50              55              60
Leu Gly Pro Asn Gly Ser Gly Lys Thr Thr Leu Val Arg Thr Leu Cys
  65              70              75              80
Gly Ala Leu Ser Pro Glu Ser Gly Ser Val Lys Phe Asp Gly Thr Asp
      85              90              95
Leu Ser Thr Met Ser Ala Ser Cys Ile Ala Arg Arg Ile Ala Ile Val
      100              105              110
Trp Gln Ser Ala Thr Ala Pro Ser Asp Leu Thr Val Arg His Leu Val
      115              120              125
Gly Tyr Gly Arg Tyr Ala His Thr Pro Trp Trp Gln Ile Arg Asp Thr
      130              135              140
Ser Ala Asp Ser His Val Glu Gln Ala Met Glu Leu Ala Asp Val Thr
  145              150              155              160
Cys Phe Ala Asp Arg Arg Val Thr Thr Leu Ser
      165              170

```

<210> 2619

<211> 348

<212> DNA

<213> Homo sapiens

<400> 2619

```

nnaaaatttcg acgacettga ggttttcttc aagctgttgc cgcgttcggc anccggggaa
60
cggatgaacc cgtacaactc ggtgtggagc ggtgtgaccg acggtgacgg gccgcaggaa
120
cagcacgtca ttttcettga taacggtcgt accgacgtgc ttgccgacac ccttggtcgc
180
gaagtgttgc ggtgcatccg gtgtgcttcg tgtatcaata tctgcccggt ttacgagcgg
240
gcggggcggtc acccttacgg ctcggtgtac cccggggccga ttggtgcggt gctcaatccg
300
cagctgcggg gcgtggagca tcccgatgat cgtggtctgc catacgcg
348

```

<210> 2620

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2620

```

Xaa Asn Phe Asp Asp Leu Glu Val Phe Leu Lys Leu Leu Pro Arg Ser
  1              5              10              15
Ala Xaa Gly Glu Arg Met Asn Pro Tyr Asn Ser Val Trp Ser Gly Val
      20              25              30
Thr Asp Gly Asp Gly Pro Gln Glu Gln His Val Ile Phe Leu Asp Asn
      35              40              45
Gly Arg Thr Asp Val Leu Ala Asp Thr Leu Gly Arg Glu Val Leu Arg
      50              55              60
Cys Ile Arg Cys Ala Ser Cys Ile Asn Ile Cys Pro Val Tyr Glu Arg
      65              70              75              80
Ala Gly Gly His Pro Tyr Gly Ser Val Tyr Pro Gly Pro Ile Gly Ala

```

	85		90		95										
Val	Leu	Asn	Pro	Gln	Leu	Arg	Gly	Val	Glu	His	Pro	Val	Asp	Arg	Gly
	100						105						110		
Leu	Pro	Tyr	Ala												
	115														

<210> 2621
 <211> 1485
 <212> DNA
 <213> Homo sapiens

<400> 2621
 acgcgtgcag gtaaaccaga ggccgtgtga ccagctcagt gctgggttac ggaacaactc
 60
 ttacttttaa aaattacttg tcccccaaa ttgttgagtg ccgccgtttg gtttcctatg
 120
 ttttctttcc ctgttttgat tttgctgaag ggagaggtgg tggtaggttag gatcagagct
 180
 ctctggcat ccgtggggag gatttgctgg tggtaggttc gggctcatgc ccagacacac
 240
 tcaactgcccc gtctgtccaa ggcctccct tcccccttgc tggtagggagg agctcgtgtg
 300
 ctcttggtgc gcttactgga agggcgtttt tcagagctgc agggacaggg tgagcagctg
 360
 aagggtagg agggaagccg gcccccgctc tgcagaagct gcatttcagc tgaatctgtg
 420
 tttcagcctc agttggttgc accgttagcc cctctcctcc cggatggtca tgtttttgtc
 480
 acattagaga ataaacagcc acacacacat ttttttttcc tttaaaacag taacttggaa
 540
 atatgaaaag gccagaagga ggagcaaggg ctgttttctg gagtgggtga ggtgttgtcc
 600
 tgcagttgtc attgtcttct ccaccgggct gtccccatct atttcctgtg gaactgaatc
 660
 cctcctccct ccactccttg ggagcccagg tggctccttg ccaccattca ggctttccaa
 720
 gaagccaacc accttgagga ttttttttct tgaatttgcg tgttttcttc tgcctccttt
 780
 agataaaaag cagctcaaga gaccttatct tagggatgag aaaaacatgc atattaatcc
 840
 catctgagtg attgtcagtg taaggccttt taaaacaaaa gcaagttctt tgtaggaat
 900
 tgggtcaaat tcactctctt ctttaagccc atcaactccc aggacggttt gagttactca
 960
 gttacctaa gcttctattc atccaaatca ttttctagag tcaactgtata agggctctatg
 1020
 agtagctgtg tatgaataaa tattacctgt ctacctcaaa atacacatac tgetgaagca
 1080
 ttctgtacaa ccgtgtgtta tcacagtgc gttttaagtg taacngttga acttaggcat
 1140
 tttctgtgt ggcggaataa gaaaggatnt aacagttaca agcctccaaa ttcagataaa
 1200
 attaaatcac agttcagatg aaactgaata tcattgtaat aatctcataa tatatatattg
 1260

taacttgnta gctatctttg aaatcactgn actttgcaat ggtgctaagc tgatagattt
 1320
 aaatacacag acgggagcagtg ggcgcccgtg tcgatgtctt cagccagtgg tgaccctgct
 1380
 tttgtaaccg cgttaacctg acaaaacctc agcagcagaa gtccctattt ttctaggagt
 1440
 ttatcgtgca gacagtcttc actacaggac tcggccctgg ggccc
 1485

<210> 2622

<211> 83

<212> PRT

<213> Homo sapiens

<400> 2622

Met	Phe	Ser	Phe	Pro	Val	Leu	Ile	Leu	Leu	Lys	Gly	Glu	Val	Val	Val
1				5				10					15		
Val	Arg	Ile	Arg	Ala	Leu	Leu	Ala	Ser	Val	Gly	Arg	Ile	Cys	Trp	Trp
			20					25					30		
Trp	Leu	Arg	Ala	His	Ala	Gln	Thr	His	Ser	Leu	Pro	Arg	Leu	Ser	Lys
			35				40					45			
Ala	Ser	Pro	Ser	Pro	Leu	Leu	Val	Gly	Gly	Ala	Arg	Val	Leu	Leu	Gly
	50					55					60				
Arg	Leu	Leu	Glu	Gly	Arg	Phe	Ser	Glu	Leu	Gln	Gly	Gln	Gly	Glu	Gln
65					70					75				80	
Leu	Lys	Gly													

<210> 2623

<211> 3524

<212> DNA

<213> Homo sapiens

<400> 2623

nggatccgaa ttcgcggccg cgtcgactgg agaggacggc gttatcttta ttaactggag
 60
 gcgacggcgg ctgcggcgcc ggcgggaccc ccaggcctcc tccgggggat gaaaatcggc
 120
 agtgggttcc tgagtggcgg cggaggtacc ggcagtagcg gtggtagcgg ctccggcgcc
 180
 ggtggtagtg gcggcgcgcc cggcgcgccc agcagcgcca ggagggcaga gatggaaccc
 240
 acctttcccc agggatatgt tatgttcaac caccgtcttc ccccggtcac cagcttcacc
 300
 cggccggcgg ggtcggccgc cctcccccg caatgcgtgt tctctctc tacctccgca
 360
 gccccggccg ctgagcccc cctccgcca gccccggaca tgactttcaa gaaggagccg
 420
 gcggcgtagc ccgcgccctt cccctcgagc aggcctcct ggggggtctt gcagtctttg
 480
 gttagcatca aacaggagaa acccgcgat cctgaggagc agcagtccca ccaccacat
 540
 caccaccacc actatggggg gctgttcgct ggagctgaag agaggtctcc aggcctagga
 600

ggcggggaag gggggagtcg cggcgtcatc caggacctca gtattctcca ccagcatgtc
660
cagcagcaac cagcccagca ccaccgtgac gtattactca gcagcagtag caggactgat
720
gaccaccatg gcactgagga gccaaagcag gacactaatg tcaaaaaggc aaaaaggcca
780
aagccagaat ctcaggggaat caaagccaag aggaagccaa gtgcatcttc caaaccttct
840
ttggttggag atggagaagg tgccatcctc tccccagtc agaaacctca tatctgtgat
900
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<211> 895

<212> PRT

<213> Homo sapiens

<400> 2624

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<212> DNA

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Phe Pro Leu His Pro Met Met Ile Thr Asn Ala Glu Arg Leu Arg Arg
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 2632

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 Glu Ser Tyr Ile Phe Lys Ile Val Pro Met Leu Asn Pro Asp Gly Val
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 355 360 365
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<210> 2633

<211> 1569

<212> DNA

<213> Homo sapiens

<400> 2633

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<210> 2634

<211> 59

<212> PRT

<213> Homo sapiens

<400> 2634

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<211> 1062

<212> DNA

<213> Homo sapiens

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<211> 63
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<210> 2638

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<213> Homo sapiens

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Leu Gln Glu Ala Gly Thr Phe Arg His Thr Leu Trp Lys Arg Val Gln
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Gly Ala Val Thr Pro Leu Leu Ala Ser Met Ile Ser Phe Ile Asp Arg
 65             70             75             80
Asp Gly Asn Leu Glu Leu Leu Thr Arg Pro Asp Thr Pro Pro Trp Ala
 85             90             95
Arg Asp Leu Trp Met Phe Ile Phe Ser Asp Thr Met Leu Leu Asn Ile
100            105            110
Pro Leu Val Met Asn Asn Glu Arg His Lys Gly Glu Met Ala Tyr Ile
115            120            125
Val Val Gln Asn His Met Asn Leu Ser Glu Asn Ala Ser Asn Asn Val
130            135            140
Pro Phe Ser Trp Lys Ile Lys Asp Tyr Leu Glu Glu Leu Trp Val Gln
145            150            155            160
Ala Gln Tyr Ile Thr Asp Ala Glu Gly Leu Pro Lys Lys Phe Val Asp
165            170            175
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180            185            190
Glu Pro Gln Gln Glu Leu Leu Gln Cys Tyr Leu Lys Asp Phe Ile Leu
195            200            205
Leu Thr Met Arg Val Ser Thr Glu Glu Glu Leu Lys Phe Leu Gln Met
210            215            220
Ala Leu Trp Ser Cys Thr Arg Lys Leu Lys Ala Ala Ser Glu Ala Pro
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<210> 2639

<211> 3777

<212> DNA

<213> Homo sapiens

<400> 2639

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<211> 645

<212> PRT

<213> Homo sapiens

<400> 2640

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<212> DNA

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			20					25					30		
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Cys	Leu	Thr	Leu	Tyr	Thr	Gly	Arg	Gly	Gly	Asp	Leu	Gln	Lys	Ile	Gly
			100					105					110		
Glu	Phe	Cys	Met	Asp	Tyr	Ser	Glu	Val	Pro	Asn	Phe	Ser	Glu	Pro	Asn
		115					120					125			
Pro	Glu	Tyr	Ser	Thr	Gln	Gln	Ala	Pro	Asn	Lys	Ala	Val	Gln	Asn	Asp
		130				135					140				
Ser	Asn	Pro	Ser	Ala	Ser	Gln	Pro	Thr	Thr	Gly	Pro	Ser	Ala	Ala	Ser
145					150					155				160	
Pro	Ala	Ser	Glu	Asn	Gln	Asn	Gly	Asn	Gly	Met	Ser	Ala	Pro	Pro	Gly
				165					170					175	
Phe	Arg	Val	Val	Ala	His	Ile	Pro	Leu	Ile	Leu	Pro	Pro	Thr	His	Pro
			180					185					190		
Ala	Pro	Glu	Ser	Leu	Glu	Ala	Ser	Pro	Thr	Thr	His	Leu	Gln	Ala	Arg
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Leu

<210> 2653

<211> 2103

<212> DNA

<213> Homo sapiens

<400> 2653

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120
caagctactg accgtactcg ggcgtattag gagccgcgtt ccagcctcac accccacggt
180
gctgttttcg acttcagaaa ggatctagcc tcagcacaga agcgccctcag gcgcggcgca
240
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300
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480
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720
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1140
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1260
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1620

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 1680
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 1740
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 1920
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 1980
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 ggc
 2103

<210> 2654
 <211> 70
 <212> PRT
 <213> Homo sapiens

<400> 2654
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 Ser Asp Ser Lys Cys Leu Leu Leu Gly Ala Val Ala His Ala Cys
 35 40 45
 Asn Pro Ser Thr Leu Gly Gly Arg Gly Gly Arg Ile Thr Arg Ser Gly
 50 55 60
 Asp Arg Asp Tyr Pro Gly
 65 70

<210> 2655
 <211> 1752
 <212> DNA
 <213> Homo sapiens

<400> 2655
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 120
 tcttctttgt gattgctttt ttagagacgg atttttttcc agatttgtgc ttcttgtgtt
 180
 ttgctttttt tttgatgac aataacttat tctggatctc aggtttgtaa gacttgaatg
 240
 caagagaatg aagaccttca cgctttctct gtaagttttc attcaaaaca tctttcaatt
 300
 tctttttttt cttttttctt ttttttgccc tcatttttagt tagtttgagt ttcttgtggc
 360

tctgtagtga ctgctctaata agaatatccc ttacaacttt gtggcagtta atttctggat
420
gatcactgtg acttccattt acatgtattt ggcaagattt tagagtattt tcttttaatg
480
gactgggttc aatctttatt ctggaagctt caccgtattt ttcctgattt tctataaacc
540
ttatttcacc tggactgaga ggctctccaa agccagtaac ttcccctgga ctccttgggt
600
tctctaaatt ttctttacaa caatcagttt ttttaatttc acaaggcctg cgaattctaa
660
ttcatagtt ggattttact cccatttcaa cagagatgtc atgattatcc aagatcattt
720
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780
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1140
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1260
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1380
aacgttccaa ttcgtaaaag actatttctg gcaaatttag aatttgctga gctaaacaaa
1440
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1620
ccataaaatg ataaatttta agtatattta tcttttagtca aaaaggcaat caactgtcct
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<210> 2656

<211> 493

<212> PRT

<213> Homo sapiens

<400> 2656

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 20      25      30
Arg Cys Leu Leu Met Pro Gln Cys Asn Ala Phe Leu Ser Lys Ile Met
 35      40      45
Thr Ser Leu Leu Ser Pro Pro His Arg Arg Pro Thr Leu His Arg Arg
 50      55      60
Pro Thr Leu Pro Tyr Arg Thr Trp Glu Ala Ala Leu Arg Gln Lys Val
 65      70      75      80
Gln Gln Trp Tyr Thr Ala Val Gly Gln Thr Glu Asn Pro Asp Asn Cys
 85      90      95
Ala Glu Lys Leu Gly Leu Cys Pro Gln Phe Phe Lys Val Leu Gly Glu
 100     105     110
Val Asn Pro Leu Glu Glu Lys Pro Phe His Glu Leu Pro Phe Tyr Gln
 115     120     125
Lys Val Trp Leu Leu Lys Gly Leu Cys Asp Phe Val Tyr Asp Thr His
 130     135     140
Lys Glu Val Gln Asp Ala Val Leu Gly Gln Pro Ile His Glu Cys Arg
 145     150     155     160
Ala Val Ile Leu Arg Tyr Asp Tyr Leu Glu Thr Ala Tyr Val His Phe
 165     170     175
Pro Gln Phe Cys Gly Ala Asp Val Arg Ile Tyr Lys Gln Arg Pro Phe
 180     185     190
Gln Ala Pro Glu Phe Pro Ile Pro Pro Ile Lys Ile Gln Arg Val Pro
 195     200     205
Arg Ile Lys Leu Glu Lys Leu Lys Cys Asp Tyr Val Ser Thr Ser Asn
 210     215     220
Gly Glu His Arg Cys Ser Arg Asp Ser Leu Pro Ser Ser Phe Lys Lys
 225     230     235     240
Glu Gln Glu Asn Asn Phe Asp Pro Ala Cys Cys Pro Ala Lys Met Ile
 245     250     255
Leu Asp Asn His Asp Ile Ser Val Glu Met Gly Val Lys Ser Asn Tyr
 260     265     270
Glu Ile Arg Ile Arg Arg Pro Cys Glu Ile Lys Lys Thr Asp Cys Cys
 275     280     285
Lys Glu Asn Leu Glu Lys Pro Arg Ser Pro Gly Glu Val Thr Gly Phe
 290     295     300
Gly Glu Pro Leu Ser Pro Gly Glu Ile Arg Phe Ile Glu Asn Gln Glu
 305     310     315     320
Lys Tyr Gly Glu Ala Ser Arg Ile Lys Ile Glu Pro Ser Pro Leu Lys
 325     330     335
Glu Asn Thr Leu Lys Ser Cys Gln Ile His Val Asn Gly Ser His Ser
 340     345     350
Asp His Pro Glu Ile Asn Cys His Lys Val Val Arg Asp Ile Leu Leu
 355     360     365
Glu Gln Ser Leu Gln Ser His Lys Lys Leu Lys Leu Thr Lys Met Arg
 370     375     380
Ala Lys Lys Lys Lys Lys Lys Lys Lys Leu Lys Asp Val Leu Asn
 385     390     395     400
Glu Asn Leu Gln Arg Lys Arg Glu Gly Leu His Ser Leu Ala Phe Lys
 405     410     415
Ser Tyr Lys Pro Glu Ile Gln Asn Lys Leu Leu Ile Ile Lys Lys Lys

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	420		425		430										
Ala	Lys	His	Lys	Lys	His	Lys	Ser	Gly	Lys	Lys	Ser	Val	Ser	Lys	Lys
	435					440						445			
Ala	Ile	Thr	Lys	Lys	Arg	Lys	Thr	Val	Ile	Lys	Ser	Pro	Thr	Val	Pro
	450					455						460			
Glu	Phe	Gln	Leu	Ile	Cys	Thr	Asn	Leu	Asp	Glu	Leu	Arg	Glu	Leu	Ile
465					470					475				480	
Thr	Lys	Ile	Glu	Asn	Glu	Leu	Lys	Asp	Leu	Glu	Lys	Lys			
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<210> 2657

<211> 972

<212> DNA

<213> Homo sapiens

<400> 2657

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480
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540
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780
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<210> 2658

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2658

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Cys Thr Ala Cys Ala Cys His Thr Leu Pro Ser Gly Pro Glu Gly Gly
      20             25             30
Leu Trp Gly Gly Ala Gly Glu Arg Gly Cys Gln Ala Trp Ala Ala Ala
      35             40             45
Asp Leu Gly Gly His Gly Gly Ser Met Pro Ser Thr Ala Gly Trp Gly
      50             55             60
Ala Leu Pro Gly Pro Ala Pro Ser Met His Gly Trp
65             70             75

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<210> 2659

<211> 691

<212> DNA

<213> Homo sapiens

<400> 2659

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120
aatggagaga acaccttcaa acgcattgga ccccgctgg agaagcctgt ggagaagggtg
180
cagaggggtgg aggcctctcc gagggccgtt ccgcagaacc tgccacagcc acagatgcca
240
ccctatgect tcgcgcaccc acccttcccc ctgcctcccc tgcggcctgt gttcaacaac
300
ttcccactca acatggggcc tatcccagcc ccgtacgtgc cccctctgcc caacgtgcgg
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420
ggccccagc cgcggcatcg cttctgatgg ccccgaaacc ccattgagca gcacaaagcc
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cgtttggggg aggagtgtgg atggagaacc ctcccccaag gctggtgtct gtaccattgc
540
atcctaagtc agcttgaagg gtaggctggg tttcttccca ccccttccct agaagggtta
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aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa a
691

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<210> 2660

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2660

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 1             5             10             15
Thr Phe Lys Arg Ile Gly Pro Pro Leu Glu Lys Pro Val Glu Lys Val

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Gln Arg Val Glu Ala Leu Pro Arg Pro Val Pro Gln Asn Leu Pro Gln					
35		40		45	
Pro Gln Met Pro Pro Tyr Ala Phe Ala His Pro Pro Phe Pro Leu Pro					
50		55		60	
Pro Val Arg Pro Val Phe Asn Asn Phe Pro Leu Asn Met Gly Pro Ile					
65		70		75	80
Pro Ala Pro Tyr Val Pro Pro Leu Pro Asn Val Arg Val Asn Tyr Asp					
	85		90		95
Phe Gly Pro Ile His Met Pro Leu Glu His Asn Leu Pro Met His Phe					
	100		105		110
Gly Pro Gln Pro Arg His Arg Phe					
115		120			

<210> 2661

<211> 1395

<212> DNA

<213> Homo sapiens

<400> 2661

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 720
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 780
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 1020

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 1260
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 1395

<210> 2662

<211> 415

<212> PRT

<213> Homo sapiens

<400> 2662

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			20					25					30		
Lys	Leu	Glu	Met	Lys	Ala	Leu	Arg	Glu	Leu	Asp	Arg	Phe	Ser	Val	Leu
			35				40					45			
Asn	Ser	Gln	His	Met	Phe	Glu	Val	Leu	Ala	Ala	Met	Asn	His	Arg	Ser
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Leu	Ile	Leu	Leu	Asp	Glu	Cys	Ser	Lys	Val	Val	Leu	Asp	Asn	Ile	His
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				85					90					95	
Leu	Gln	Tyr	His	Asn	Leu	Asp	Leu	Phe	Lys	Gly	Leu	Ala	Asp	Tyr	Val
			100					105					110		
Ala	Ala	Thr	Phe	Asp	Ile	Trp	Lys	Phe	Arg	Lys	Val	Leu	Phe	Ile	Leu
			115				120					125			
Ile	Leu	Phe	Glu	Asn	Leu	Gly	Phe	Arg	Pro	Val	Gly	Leu	Met	Asp	Leu
	130				135						140				
Phe	Met	Lys	Arg	Ile	Val	Glu	Asp	Pro	Glu	Ser	Leu	Asn	Met	Lys	Asn
145				150						155				160	
Ile	Leu	Ser	Ile	Leu	His	Thr	Tyr	Ser	Ser	Leu	Asn	His	Val	Tyr	Lys
			165					170					175		
Cys	Gln	Asn	Lys	Glu	Gln	Phe	Val	Glu	Val	Met	Ala	Ser	Ala	Leu	Thr
			180					185					190		
Gly	Tyr	Leu	His	Thr	Ile	Ser	Ser	Glu	Asn	Leu	Leu	Asp	Ala	Val	Tyr
	195					200						205			
Ser	Phe	Cys	Leu	Met	Asn	Tyr	Phe	Pro	Leu	Ala	Pro	Phe	Asn	Gln	Leu
	210				215						220				
Leu	Gln	Lys	Asp	Ile	Ile	Ser	Glu	Leu	Leu	Thr	Ser	Asp	Asp	Met	Lys
225				230						235				240	
Asn	Ala	Tyr	Lys	Leu	His	Thr	Leu	Asp	Thr	Cys	Leu	Lys	Leu	Asp	Asp
			245					250					255		
Thr	Val	Tyr	Leu	Arg	Asp	Ile	Ala	Leu	Ser	Leu	Pro	Gln	Leu	Pro	Arg

	260		265		270										
Glu	Leu	Pro	Ser	Ser	His	Thr	Asn	Ala	Lys	Val	Ala	Glu	Val	Leu	Ser
	275						280					285			
Ser	Leu	Leu	Gly	Gly	Glu	Gly	His	Phe	Ser	Lys	Asp	Val	His	Leu	Pro
	290					295					300				
His	Asn	Tyr	His	Ile	Asp	Phe	Glu	Ile	Arg	Met	Asp	Thr	Asn	Arg	Asn
305				310					315					320	
Gln	Val	Leu	Pro	Leu	Ser	Asp	Val	Asp	Thr	Thr	Ser	Ala	Thr	Asp	Ile
			325					330					335		
Gln	Arg	Val	Ala	Val	Leu	Cys	Val	Ser	Arg	Ser	Ala	Tyr	Cys	Leu	Gly
	340						345					350			
Ser	Ser	His	Pro	Arg	Gly	Phe	Leu	Ala	Met	Lys	Met	Arg	His	Leu	Asn
	355					360					365				
Ala	Met	Gly	Phe	His	Val	Ile	Leu	Val	Asn	Asn	Trp	Glu	Met	Asp	Lys
	370				375				380						
Leu	Glu	Met	Glu	Asp	Ala	Val	Thr	Phe	Leu	Lys	Thr	Lys	Ile	Tyr	Ser
385				390					395					400	
Val	Glu	Ala	Leu	Pro	Val	Ala	Ala	Val	Asn	Val	Gln	Ser	Thr	Gln	
			405					410					415		

<210> 2663

<211> 1024

<212> DNA

<213> Homo sapiens

<400> 2663

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 120
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 180
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 720
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 780
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<210> 2664

<211> 199

<212> PRT

<213> Homo sapiens

<400> 2664

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Ala	Ala	Val	Ile	Thr	Ile	Thr	Phe	Asn	Pro	Leu	Tyr	Trp	Asn	Val	Val
			20					25					30		
Ala	Arg	Trp	Glu	His	Lys	Thr	Arg	Lys	Leu	Ser	Arg	Ala	Phe	Gly	Ser
		35				40						45			
Pro	Tyr	Leu	Ala	Cys	Tyr	Ser	Leu	Ser	Val	Thr	Ile	Leu	Leu	Leu	Asn
	50					55					60				
Phe	Leu	Arg	Ser	His	Cys	Phe	Thr	Gln	Ala	Met	Leu	Ser	Gln	Pro	Arg
65				70						75				80	
Met	Glu	Ser	Leu	Asp	Thr	Pro	Ala	Ala	Tyr	Ser	Leu	Gly	Leu	Ala	Leu
			85						90					95	
Leu	Gly	Leu	Gly	Val	Val	Leu	Val	Leu	Ser	Ser	Phe	Phe	Ala	Leu	Gly
			100					105					110		
Phe	Ala	Gly	Thr	Phe	Leu	Gly	Asp	Tyr	Phe	Gly	Ile	Leu	Lys	Glu	Ala
		115					120					125			
Arg	Val	Thr	Val	Phe	Pro	Phe	Asn	Ile	Leu	Asp	Asn	Pro	Met	Tyr	Trp
	130					135					140				
Gly	Ser	Thr	Ala	Asn	Tyr	Leu	Gly	Trp	Ala	Ile	Met	His	Ala	Ser	Pro
145				150						155				160	
Thr	Gly	Leu	Leu	Leu	Thr	Val	Leu	Val	Ala	Leu	Thr	Tyr	Ile	Met	Ala
			165						170					175	
Leu	Leu	Tyr	Glu	Glu	Pro	Phe	Thr	Ala	Glu	Ile	Tyr	Arg	Gln	Lys	Ala
			180					185					190		
Ser	Gly	Ser	His	Lys	Arg	Ser									
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<210> 2665

<211> 720

<212> DNA

<213> Homo sapiens

<400> 2665

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 120
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 180

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 240
 tgacgttttt ctaaaccatgg gatgcagtct gtgcagcctg cagaagcaag aggagcagta
 300
 caaattactt atgaagtttg tcaggtcaac ggcagagact tatccagagc aactcatgac
 360
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 420
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 480
 caaaccgaca tcacctttga acatatcatg gccctcacta agatgtcctc tcccagccca
 540
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 ccaaagact acattggaga catccatcag gagatggaca gggaggagct ggagctggag
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<210> 2666

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2666

Met	Gln	Ser	Val	Gln	Pro	Ala	Glu	Ala	Arg	Gly	Ala	Val	Gln	Ile	Thr
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Tyr	Glu	Val	Cys	Gln	Val	Asn	Gly	Arg	Asp	Leu	Ser	Arg	Ala	Thr	His
			20					25					30		
Asp	Gln	Ala	Val	Glu	Ala	Phe	Lys	Thr	Ala	Lys	Glu	Pro	Ile	Val	Val
			35				40					45			
Gln	Val	Leu	Arg	Arg	Thr	Pro	Arg	Thr	Lys	Met	Phe	Thr	Pro	Pro	Ser
			50			55					60				
Glu	Ser	Gln	Leu	Val	Asp	Thr	Gly	Thr	Gln	Thr	Asp	Ile	Thr	Phe	Glu
65					70				75					80	
His	Ile	Met	Ala	Leu	Thr	Lys	Met	Ser	Ser	Pro	Ser	Pro	Pro	Val	Leu
			85					90						95	
Asp	Pro	Tyr	Leu	Leu	Pro	Glu	Glu	His	Pro	Ser	Ala	His	Glu	Tyr	Tyr
			100					105					110		
Asp	Pro	Asn	Asp	Tyr	Ile	Gly	Asp	Ile	His	Gln	Glu	Met	Asp	Arg	Glu
			115				120					125			
Glu	Leu	Glu	Leu	Glu	Glu	Val	Asp	Leu	Tyr	Arg	Met	Asn	Ser	Gln	Asp
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Lys	Leu	Gly	Leu	Thr	Val	Cys	Tyr	Arg							
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<210> 2667

<211> 289

<212> DNA

<213> Homo sapiens

<400> 2667

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 120
 tgggtgccag gcctatgttg gaggacaaga cttttcaaag aaagtattaa attcattcac
 180
 gagtgcgggc tccgcgggga gagctgcctt gtacactgcc tggccggggt ctccaggagc
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 289

<210> 2668

<211> 96

<212> PRT

<213> Homo sapiens

<400> 2668

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Asn	Phe	Lys	Asp	Ala	Arg	Asp	Ala	Glu	Gln	Leu	Ser	Lys	Asn	Lys	Gly
			20					25					30		
Asn	Pro	Phe	Ser	Val	Cys	Pro	Arg	Trp	Val	Pro	Gly	Leu	Cys	Trp	Arg
			35				40					45			
Thr	Arg	His	Phe	Lys	Glu	Ser	Ile	Lys	Phe	Ile	His	Glu	Cys	Arg	Leu
	50					55				60					
Arg	Gly	Glu	Ser	Cys	Leu	Val	His	Cys	Leu	Ala	Gly	Val	Ser	Arg	Ser
65					70					75				80	
Val	Thr	Leu	Val	Ile	Ala	Tyr	Ile	Met	Thr	Val	Thr	Asp	Phe	Gly	Trp
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<210> 2669

<211> 4285

<212> DNA

<213> Homo sapiens

<400> 2669

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 120
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 180
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 240
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 300
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 360
 cattgccgtg ctccactcca gctacgagaa ctagtaaatt gtcgttgggc agaagaagta
 420
 acacaacagc ttgatactct tcaactctgc agtctcacca aacatgaaga aaatgaaaag
 480
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 540
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 600

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660
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720
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<210> 2670

<211> 979

<212> PRT

<213> Homo sapiens

<400> 2670

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Asp	Glu	Gln	Ser	Val	Glu	Ser	Ile	Ala	Glu	Val	Phe	Arg	Cys	Phe	Ile
			20					25					30		
Cys	Met	Glu	Lys	Leu	Arg	Asp	Ala	Arg	Leu	Cys	Pro	His	Cys	Ser	Lys
	35						40					45			
Leu	Cys	Cys	Phe	Ser	Cys	Ile	Arg	Arg	Trp	Leu	Thr	Glu	Gln	Arg	Ala
	50					55					60				
Gln	Cys	Pro	His	Cys	Arg	Ala	Pro	Leu	Gln	Leu	Arg	Glu	Leu	Val	Asn
65				70					75					80	
Cys	Arg	Trp	Ala	Glu	Val	Thr	Gln	Gln	Leu	Asp	Thr	Leu	Gln	Leu	
			85				90					95			
Cys	Ser	Leu	Thr	Lys	His	Glu	Glu	Asn	Glu	Lys	Asp	Lys	Cys	Glu	Asn
	100						105					110			
His	His	Glu	Lys	Leu	Ser	Val	Phe	Cys	Trp	Thr	Cys	Lys	Lys	Cys	Ile
	115					120					125				
Cys	His	Gln	Cys	Ala	Leu	Trp	Gly	Gly	Met	His	Gly	Gly	His	Thr	Phe
	130				135			140							
Lys	Pro	Leu	Ala	Glu	Ile	Tyr	Glu	Gln	His	Val	Thr	Lys	Val	Asn	Glu
145				150				155						160	
Glu	Val	Ala	Lys	Leu	Arg	Arg	Arg	Leu	Met	Glu	Leu	Ile	Ser	Leu	Val
			165					170						175	
Gln	Glu	Val	Glu	Arg	Asn	Val	Glu	Ala	Val	Arg	Asn	Ala	Lys	Asp	Glu
	180						185					190			
Arg	Val	Arg	Glu	Ile	Arg	Asn	Ala	Val	Glu	Met	Met	Ile	Ala	Arg	Leu
	195					200					205				
Asp	Thr	Gln	Leu	Lys	Asn	Lys	Leu	Ile	Thr	Leu	Met	Gly	Gln	Lys	Thr
	210				215						220				
Ser	Leu	Thr	Gln	Glu	Thr	Glu	Leu	Leu	Glu	Ser	Leu	Leu	Gln	Glu	Val
225				230					235					240	
Glu	His	Gln	Leu	Arg	Ser	Cys	Ser	Lys	Ser	Glu	Leu	Ile	Ser	Lys	Ser

					245					250					255
Ser	Glu	Ile	Leu	Met	Met	Phe	Gln	Gln	Val	His	Arg	Lys	Pro	Met	Ala
			260					265					270		
Ser	Phe	Val	Thr	Thr	Pro	Val	Pro	Pro	Asp	Phe	Thr	Ser	Glu	Leu	Val
		275					280					285			
Pro	Ser	Tyr	Asp	Ser	Ala	Thr	Phe	Val	Leu	Glu	Asn	Phe	Ser	Thr	Leu
		290				295					300				
Arg	Gln	Arg	Ala	Asp	Pro	Val	Tyr	Ser	Pro	Pro	Leu	Gln	Val	Ser	Gly
305					310					315					320
Leu	Cys	Trp	Arg	Leu	Lys	Val	Tyr	Pro	Asp	Gly	Asn	Gly	Val	Val	Arg
			325						330					335	
Gly	Tyr	Tyr	Leu	Ser	Val	Phe	Leu	Glu	Leu	Ser	Ala	Gly	Leu	Pro	Glu
		340						345					350		
Thr	Ser	Lys	Tyr	Glu	Tyr	Arg	Val	Glu	Met	Val	His	Gln	Ser	Cys	Asn
		355					360					365			
Asp	Pro	Thr	Lys	Asn	Ile	Ile	Arg	Glu	Phe	Ala	Ser	Asp	Phe	Glu	Val
	370					375					380				
Gly	Glu	Cys	Trp	Gly	Tyr	Asn	Arg	Phe	Phe	Arg	Leu	Asp	Leu	Leu	Ala
385				390						395					400
Asn	Glu	Gly	Tyr	Leu	Asn	Pro	Gln	Asn	Asp	Thr	Val	Ile	Leu	Arg	Phe
			405						410					415	
Gln	Val	Arg	Ser	Pro	Thr	Phe	Phe	Gln	Lys	Ser	Arg	Asp	Gln	His	Trp
		420						425					430		
Tyr	Ile	Thr	Gln	Leu	Glu	Ala	Ala	Gln	Thr	Ser	Tyr	Ile	Gln	Gln	Ile
	435						440					445			
Asn	Asn	Leu	Lys	Glu	Arg	Leu	Thr	Ile	Glu	Leu	Ser	Arg	Thr	Gln	Lys
	450					455					460				
Ser	Arg	Asp	Leu	Ser	Pro	Pro	Asp	Asn	His	Leu	Ser	Pro	Gln	Asn	Asp
465					470					475					480
Asp	Ala	Leu	Glu	Thr	Arg	Ala	Lys	Lys	Ser	Ala	Cys	Ser	Asp	Met	Leu
			485						490					495	
Leu	Glu	Gly	Gly	Pro	Thr	Thr	Ala	Ser	Val	Arg	Glu	Ala	Lys	Glu	Asp
		500						505					510		
Glu	Glu	Asp	Glu	Glu	Lys	Ile	Gln	Asn	Glu	Asp	Tyr	His	His	Glu	Leu
	515						520					525			
Ser	Asp	Gly	Asp	Leu	Asp	Leu	Asp	Leu	Val	Tyr	Glu	Asp	Glu	Val	Asn
	530					535					540				
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Thr	Glu	Glu	Asn	Asp	Ile	Asp	Glu	Glu	Thr	Met	Ser	Gly	Glu	Asn	Asp
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Ala	Ala	Ala	Ala	Gly	Pro	Ala	Gly	Ser	Ser	His	Gly	Tyr	Val	Gly	Ser
	595														

675 680 685
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 Thr Asp Val Lys Asn Thr Leu Ser Glu Ile Lys Ser Ser Ser Ala Ala
 705 710 715 720
 Ser Gly Asp Met Gln Thr Ser Leu Phe Ser Ala Asp Gln Ala Ala Leu
 725 730 735
 Ala Ala Cys Gly Thr Glu Asn Ser Gly Arg Leu Gln Asp Leu Gly Met
 740 745 750
 Glu Leu Leu Ala Lys Ser Ser Val Ala Asn Cys Tyr Ile Arg Asn Ser
 755 760 765
 Thr Asn Lys Lys Ser Asn Ser Pro Lys Pro Ala Arg Ser Ser Val Ala
 770 775 780
 Gly Ser Leu Ser Leu Arg Arg Ala Val Asp Pro Gly Glu Asn Ser Arg
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 Ser Lys Gly Asp Cys Gln Thr Leu Ser Glu Gly Ser Pro Gly Ser Ser
 805 810 815
 Gln Ser Gly Ser Arg His Ser Ser Pro Arg Ala Leu Ile His Gly Ser
 820 825 830
 Ile Gly Asp Ile Leu Pro Lys Thr Glu Asp Arg Gln Cys Lys Ala Leu
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 Asp Ser Asp Ala Val Val Val Ala Val Phe Ser Gly Leu Pro Ala Val
 850 855 860
 Glu Lys Arg Arg Lys Met Val Thr Leu Gly Ala Asn Ala Lys Gly Gly
 865 870 875 880
 His Leu Glu Gly Leu Gln Met Thr Asp Leu Glu Asn Asn Ser Glu Thr
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 Gly Glu Leu Gln Pro Val Leu Pro Glu Gly Ala Ser Ala Ala Pro Glu
 900 905 910
 Glu Gly Met Ser Ser Asp Ser Asp Ile Glu Cys Asp Thr Glu Asn Glu
 915 920 925
 Glu Gln Glu Glu His Thr Ser Val Gly Gly Phe His Asp Ser Phe Met
 930 935 940
 Val Met Thr Gln Pro Pro Asp Glu Asp Thr His Ser Ser Phe Pro Asp
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 Gly Glu Gln Ile Gly Pro Glu Asp Leu Ser Phe Asn Thr Asp Glu Asn
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<210> 2671

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2671

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<210> 2672

<211> 223

<212> PRT

<213> Homo sapiens

<400> 2672

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Lys	Asp	Ser	Arg	Ala	Val	Ser	Arg	His	Gly	Arg	Gly	Asn	Cys	Gly	Ala
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210

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<210> 2673

<211> 5035

<212> DNA

<213> Homo sapiens

<400> 2673

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<211> 690

<212> PRT

<213> Homo sapiens

<400> 2674

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		20					25					30			
Phe	Ile	Arg	Asp	Ser	Leu	Glu	Lys	Ser	Asp	Gln	Leu	Thr	Lys	Asn	Met
	35					40					45				
Val	Ser	Ile	Leu	Ser	Ser	Phe	Glu	Ser	Arg	Leu	Met	Lys	Leu	Glu	Asn
	50				55					60					
Ser	Ile	Ile	Pro	Val	His	Lys	Gln	Thr	Glu	Asn	Leu	Gln	Arg	Leu	Gln
65				70				75					80		
Glu	Asn	Val	Glu	Lys	Thr	Leu	Ser	Cys	Leu	Asp	His	Val	Ile	Ser	Tyr
		85					90					95			
Tyr	His	Val	Ala	Ser	Asp	Thr	Glu	Lys	Ile	Ile	Arg	Glu	Gly	Pro	Thr
	100						105					110			
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Val	Lys	Leu	Leu	Phe	Glu	Arg	Gly	Lys	Glu	Ala	Leu	Glu	Ser	Glu	Phe
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		165						170						175	
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	195					200						205			
Ser	Arg	Trp	Leu	Val	Glu	Tyr	Gly	Arg	Asn	Gln	Asp	Phe	Met	Asn	Val
	210					215						220			
Tyr	Tyr	Gln	Ile	Arg	Ser	Ser	Gln	Leu	Asp	Arg	Ser	Ile	Lys	Gly	Leu
225				230					235					240	
Lys	Glu	His	Phe	His	Lys	Ser	Ser	Ser	Ser	Ser	Gly	Val	Pro	Tyr	Ser
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[illegible]

690

<210> 2675

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2675

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<210> 2676

<211> 180

<212> PRT

<213> Homo sapiens

<400> 2676

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 35 40 45
 Ile Phe Glu Lys Ser Val Val Phe Ile Val Leu Leu Leu Gln Trp
 50 55 60
 Lys Lys Val Ala Leu Leu Asn Pro Ile Glu Asn Pro Asp Leu Lys Leu
 65 70 75 80
 Ala Ile Val Met Leu Ile Val Pro Phe Phe Val Asn Ala Leu Met Phe
 85 90 95
 Trp Val Val Asp Asn Phe Leu Met Arg Lys Gly Lys Thr Lys Ala Lys
 100 105 110
 Leu Glu Glu Arg Gly Ala Asn Gln Asp Ser Arg Asn Gly Ser Lys Val

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      130              135              140
Ile Ser Ala Asp Asp Glu Met Glu Glu Ser Asp Val Glu Glu Asp Leu
      145              150              155              160
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Gly Leu Pro Val
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<210> 2677

<211> 735

<212> DNA

<213> Homo sapiens

<400> 2677

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<210> 2678

<211> 170

<212> PRT

<213> Homo sapiens

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Arg Glu Asn Phe Ser His Ala Pro Ser Pro Asp Met Ser Ala Ala Ser

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	50					55					60						
Phe	Glu	Gly	Leu	Ser	Pro	Ala	Ser	Met	Ala	Pro	Gln	Asp	Cys	Leu			
65					70					75					80		
Ala	Gln	Leu	Arg	Leu	Ala	Gln	Glu	Ala	Ala	Gln	Val	Ser	Ser	Gly	Thr		
				85					90					95			
Arg	Val	Arg	Met	Gln	Gly	Val	Gly	Pro	Ser	Trp	Gly	Gln	Ser	Pro	Gly		
			100					105					110				
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		115					120					125					
Ser	Gln	Leu	Leu	Ser	Cys	Ser	Leu	Gly	Gly	Leu	Val	Arg	Asn	Leu	Gly		
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Thr	Arg	Ala	Ser	Ala	Ser	Arg	Glu	Trp	His	Lys	Ala	Ala	Gly	Thr	Glu		
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<212> DNA
<213> Homo sapiens
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<210> 2680
<211> 133
<212> PRT
<213> Homo sapiens
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<400> 2680
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      35      40      45
Leu Val Ser Ala Ala Ala Ser Arg Pro Trp Met Ala Arg Cys Ala
      50      55      60
Val Gly Arg His Arg Gly Cys Thr Arg Thr Gln Pro Asp Leu Gly Gln
65      70      75      80
Phe Ala Pro Thr Leu Leu His Ser Arg Gly Pro Gly Ser Thr Cys Gln
      85      90      95
Cys Gly Ser Gln Asn Ala Gln Ala Lys Tyr Arg Asp Gln Leu Thr Ile
      100      105      110
Gln Val Glu Pro Glu Ala Trp Ala Gly Ala Ser Asn Cys Pro Pro Val
      115      120      125
Arg Leu Arg Asp Ala
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<210> 2681

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2681

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420
ggacaacgtt ccagatttgt ttccagtact aatggttcat ctcttttttt ctgttcatcc
480
atcttccctt tccctgttct tgtatcctct ggtaacagct tgtggatttg atcttcagag
540
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585

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<210> 2682

<211> 116

<212> PRT

<213> Homo sapiens

<400> 2682

```

Met Asp Glu Gln Lys Lys Arg Asp Glu Pro Leu Val Leu Lys Thr Asn
1      5      10      15
Leu Glu Arg Cys Pro Ala Arg Leu Ser Asp Ser Glu Asn Glu Glu Pro
      20      25      30
Ser Arg Gly Gln Met Thr Gln Thr His Arg Ser Ala Phe Val Ser Lys

```

```

      35              40              45
Asn Asn Ser Tyr Ser Leu Ala Phe Leu Ala Gly Lys Leu Asn Ser Lys
  50              55              60
Val Glu Arg Ser Gln Ser Cys Ser Asp Thr Ala Gln Glu Arg Ala Lys
  65              70              75              80
Ser Arg Val Arg Ala Val Pro Gly Asn Lys Ala Lys Val His Leu Ser
      85              90              95
His Arg Pro Pro Gly Leu Val Arg Leu Ala Pro Ser Pro Pro Leu His
      100              105              110
Met Val Met Lys
      115

```

<210> 2683

<211> 498

<212> DNA

<213> Homo sapiens

<400> 2683

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naccggttac actgactcca aaactctcct tgggtggccta ggtgaaacct catggccaac
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atcacctgga tggccaacca cactggaagg ttggatttca tcctcatggg actcttcaga
120
cgatccaaac atccagctct acttagtgtg gtcattcttg tggttttcct gatggcggtg
180
tctgaaaatg ctgtcctgat ccttctgata cactgtgaca cctacctcca ccccccatg
240
tactttttca tcagtcaatt gtctctcatg gacatggcgt acatttctgt cactgtgccc
300
aagatgctcc tggaccaggt catgggtgtg aataagatct cagcccctga gtgtgggatg
360
cagatgttcc tctatctgac actagcaggt tcggaatttt tccttctagc caccatggcc
420
tatgaccgct acgtggccat ctgccatcct ctccgttacc ctgtctcat gaaccatagg
480
gtctgtcttt tcctggca
498

```

<210> 2684

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2684

```

Met Ala Asn Ile Thr Trp Met Ala Asn His Thr Gly Arg Leu Asp Phe
  1              5              10              15
Ile Leu Met Gly Leu Phe Arg Arg Ser Lys His Pro Ala Leu Leu Ser
      20              25              30
Val Val Ile Phe Val Val Phe Leu Met Ala Leu Ser Glu Asn Ala Val
      35              40              45
Leu Ile Leu Leu Ile His Cys Asp Thr Tyr Leu His Thr Pro Met Tyr
      50              55              60
Phe Phe Ile Ser Gln Leu Ser Leu Met Asp Met Ala Tyr Ile Ser Val
      65              70              75              80
Thr Val Pro Lys Met Leu Leu Asp Gln Val Met Gly Val Asn Lys Ile

```

```

      85              90              95
Ser Ala Pro Glu Cys Gly Met Gln Met Phe Leu Tyr Leu Thr Leu Ala
      100              105              110
Gly Ser Glu Phe Phe Leu Leu Ala Thr Met Ala Tyr Asp Arg Tyr Val
      115              120              125
Ala Ile Cys His Pro Leu Arg Tyr Pro Val Leu Met Asn His Arg Val
      130              135              140
Cys Leu Phe Leu Ala
145

```

<210> 2685

<211> 391

<212> DNA

<213> Homo sapiens

<400> 2685

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60
cgcaatgagc tggctgccct ggcacgaggg gcgctggcgg gcatggctca gcttcgggaa
120
ctctacctca caggcaaccg actgcgaagc cgggccctgg gccccctgct ctgggtggac
180
ctcgcccatc tgcagttgct ggacatcgcc gggaaatcagc tcacagagat cccggagggg
240
ctccccccat cgctggagta tctgtacctg cagaataaca agattagcgc tgttcttgcc
300
agcgcccttg actctactcc caacctcaag gggatctttc tcaggttcaa caagctggct
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391

```

<210> 2686

<211> 130

<212> PRT

<213> Homo sapiens

<400> 2686

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Xaa Arg Leu His Thr Leu Pro Pro Gly Leu Pro Arg Asn Val His Val
1      5      10      15
Leu Lys Val Lys Arg Asn Glu Leu Ala Ala Leu Ala Arg Gly Ala Leu
20     25     30
Ala Gly Met Ala Gln Leu Arg Glu Leu Tyr Leu Thr Gly Asn Arg Leu
35     40     45
Arg Ser Arg Ala Leu Gly Pro Arg Ala Trp Val Asp Leu Ala His Leu
50     55     60
Gln Leu Leu Asp Ile Ala Gly Asn Gln Leu Thr Glu Ile Pro Glu Gly
65     70     75     80
Leu Pro Pro Ser Leu Glu Tyr Leu Tyr Leu Gln Asn Asn Lys Ile Ser
85     90     95
Ala Val Pro Ala Ser Ala Phe Asp Ser Thr Pro Asn Leu Lys Gly Ile
100    105    110
Phe Leu Arg Phe Asn Lys Leu Ala Val Gly Ser Val Val Glu Ser Ala
115    120    125
Phe Arg

```

130

<210> 2687

<211> 399

<212> DNA

<213> Homo sapiens

<400> 2687

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 120
 tgggaaatga caggtaagac agggactaca aaagaccaag cagacaataa aattccccct
 180
 gacagtccgc taggccttat gttaagatac cggaagata atgaaaggac caaacacaag
 240
 aaaagacagc aaatgataaa atattgctgg tttatttgga ctaaggaacc catcctgaaa
 300
 cctttggtct tttggccaca gttagggttg agcggggact ggatatgccca actcctaate
 360
 cagtatgtaa aggataaaag tccagtttct caagaggag
 399

<210> 2688

<211> 91

<212> PRT

<213> Homo sapiens

<400> 2688

Met	Thr	Gly	Lys	Thr	Gly	Thr	Thr	Lys	Asp	Gln	Ala	Asp	Asn	Lys	Ile
1				5					10					15	
Pro	Pro	Asp	Ser	Pro	Leu	Gly	Leu	Met	Leu	Arg	Tyr	Arg	Lys	Asp	Asn
			20					25					30		
Glu	Arg	Thr	Lys	His	Lys	Lys	Arg	Gln	Gln	Met	Ile	Lys	Tyr	Cys	Trp
		35					40					45			
Phe	Ile	Trp	Thr	Lys	Glu	Pro	Ile	Leu	Lys	Pro	Leu	Val	Phe	Trp	Pro
	50					55				60					
Gln	Leu	Gly	Leu	Ser	Gly	Asp	Trp	Ile	Cys	Gln	Leu	Leu	Ile	Gln	Tyr
65				70					75					80	
Val	Lys	Asp	Lys	Ser	Pro	Val	Ser	Gln	Glu	Glu					
			85					90							

<210> 2689

<211> 560

<212> DNA

<213> Homo sapiens

<400> 2689

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 60
 gccctgtttc ctcagaaaag atacaaaaat gtgggtctca ccaagttgcc caggctggtc
 120
 tcaaactcct ggctcaaga aatcctcctg gttcagcctc acaaagctcc gagattacag
 180

ttgcatgtct gtgacaagct tggaggccga gttgcaagct aagatccaag agagccatcc
 240
 tgaattgcga cgcgtgtact tcaataaggg attgtaaagc agggaggaaa cctctgcagc
 300
 tcattctgcc actgcaaagc tgggtgtagcc atgctgggtga gaaaaatcct gttcaacctg
 360
 ggttgggtata tcgtctttga aaaacaatga ctataaaagc tacaggaaaag gtatttcagg
 420
 acgtttattg aaggcattgg tggagctctc tgtatgtgtt ttgctctgca gggaaactcaa
 480
 agttggcatt cccgtcacgg atgagaatgg gaaccgcttg ggggagtcgg cgaacgctgc
 540
 gaaacaagcc atcacgccag
 560

<210> 2690

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2690

Ala	Pro	Ile	Gln	Val	Gly	Leu	Val	Gly	Phe	Cys	Leu	Val	Phe	Ala	Thr
1			5					10					15		
Pro	Leu	Cys	Cys	Ala	Leu	Phe	Pro	Gln	Lys	Arg	Tyr	Lys	Asn	Val	Gly
		20					25					30			
Leu	Thr	Lys	Leu	Pro	Arg	Leu	Val	Ser	Asn	Ser	Trp	Pro	Gln	Glu	Ile
	35					40					45				
Leu	Leu	Val	Gln	Pro	His	Lys	Ala	Pro	Arg	Leu	Gln	Leu	His	Val	Cys
	50					55				60					
Asp	Lys	Leu	Gly	Gly	Arg	Val	Ala	Ser							
65					70										

<210> 2691

<211> 532

<212> DNA

<213> Homo sapiens

<400> 2691

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 60
 caggggggtgc tgaaggccct cgactacatc caccacatgg gatatgtaca caggagtgtc
 120
 aaagccagcc acatcctgat ctctgtggat gggaaggctc acctgtcttg tttgcgcagc
 180
 aacctcagca tgataagcca tgggcagcgg cagcgagtgg tocacgattt tccaagtac
 240
 agtgtaagg ttctgccgtg gctcagcccc gaggtcctcc agcagaatct ccagggttat
 300
 gatgccaaagt ctgacatcta cagtgtggga atcacagcct gtgaactggc caacggccat
 360
 gtccccctta aggatatgcc tgccaccagc atgctgctag agaaactgaa cggcacagtg
 420
 cctgectgt tggataccag caccatcccc gctgaggagc tgaccatgag ccttcgcgc
 480

tcagtggcca actctggcct gagtgacagc ctgaccacca gcacaccccg gg
532

<210> 2692

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2692

Asp Leu Ile Cys Thr His Phe Met Asp Gly Met Asn Glu Leu Ala Ile
1 5 10 15
Ala Tyr Ile Leu Gln Gly Val Leu Lys Ala Leu Asp Tyr Ile His His
20 25 30
Met Gly Tyr Val His Arg Ser Val Lys Ala Ser His Ile Leu Ile Ser
35 40 45
Val Asp Gly Lys Val Tyr Leu Ser Gly Leu Arg Ser Asn Leu Ser Met
50 55 60
Ile Ser His Gly Gln Arg Gln Arg Val Val His Asp Phe Pro Lys Tyr
65 70 75 80
Ser Val Lys Val Leu Pro Trp Leu Ser Pro Glu Val Leu Gln Gln Asn
85 90 95
Leu Gln Gly Tyr Asp Ala Lys Ser Asp Ile Tyr Ser Val Gly Ile Thr
100 105 110
Ala Cys Glu Leu Ala Asn Gly His Val Pro Phe Lys Asp Met Pro Ala
115 120 125
Thr Gln Met Leu Leu Glu Lys Leu Asn Gly Thr Val Pro Cys Leu Leu
130 135 140
Asp Thr Ser Thr Ile Pro Ala Glu Glu Leu Thr Met Ser Pro Ser Arg
145 150 155 160
Ser Val Ala Asn Ser Gly Leu Ser Asp Ser Leu Thr Thr Ser Thr Pro
165 170 175
Arg

<210> 2693

<211> 798

<212> DNA

<213> Homo sapiens

<400> 2693

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ctggggaccc acagcttcga ggggctgcac aatctggaga cactagacct gaattataac
120
aagctgcagg agttccctgt ggccatccgg accctgggca gactgcagga actggggttc
180
cataacaaca acatcaaggc catcccagaa aaggccttca tggggaaccc tctgctacag
240
acgatacact tttatgataa cccaatccag tttgtgggaa gatcggcatt ccagtacctg
300
cctaaactcc acacactatc tctgaatggt gccatggaca tccaggagtt tccagatctc
360
aaaggcacca ccagcctgga gatcctgacc ctgaccgcg caggcatccg gctgctccca
420

tcggggatgt gccaacagct gccagggctc cgagtcctgg aactgtctca caatcaaatt
 480
 gaggagctgc ccagcctgca caggtgtcag aaattggagg aaatcggcct ccaacacaac
 540
 cgcacatctggg aaattggagc tgacaccttc agccagctga gctccctgca agccctggat
 600
 ttaaggtgga acgccatccg gtccatccac cccgaggcct tctccaccct gcactccctg
 660
 gtcaagctgg acctgacaga caaccagctg accacactgc ccctggctgg acttgggggc
 720
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 780
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 798

<210> 2694

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2694

Ala	Phe	Gln	Asn	Leu	Thr	Ser	Leu	Val	Val	Leu	His	Leu	His	Asn	Asn
1			5					10						15	
Arg	Ile	Gln	His	Leu	Gly	Thr	His	Ser	Phe	Glu	Gly	Leu	His	Asn	Leu
		20						25					30		
Glu	Thr	Leu	Asp	Leu	Asn	Tyr	Asn	Lys	Leu	Gln	Glu	Phe	Pro	Val	Ala
	35					40						45			
Ile	Arg	Thr	Leu	Gly	Arg	Leu	Gln	Glu	Leu	Gly	Phe	His	Asn	Asn	Asn
	50				55					60					
Ile	Lys	Ala	Ile	Pro	Glu	Lys	Ala	Phe	Met	Gly	Asn	Pro	Leu	Leu	Gln
65				70					75					80	
Thr	Ile	His	Phe	Tyr	Asp	Asn	Pro	Ile	Gln	Phe	Val	Gly	Arg	Ser	Ala
			85					90					95		
Phe	Gln	Tyr	Leu	Pro	Lys	Leu	His	Thr	Leu	Ser	Leu	Asn	Gly	Ala	Met
		100						105					110		
Asp	Ile	Gln	Glu	Phe	Pro	Asp	Leu	Lys	Gly	Thr	Thr	Ser	Leu	Glu	Ile
	115					120						125			
Leu	Thr	Leu	Thr	Arg	Ala	Gly	Ile	Arg	Leu	Leu	Pro	Ser	Gly	Met	Cys
	130				135						140				
Gln	Gln	Leu	Pro	Arg	Leu	Arg	Val	Leu	Glu	Leu	Ser	His	Asn	Gln	Ile
145				150					155					160	
Glu	Glu	Leu	Pro	Ser	Leu	His	Arg	Cys	Gln	Lys	Leu	Glu	Glu	Ile	Gly
			165					170						175	
Leu	Gln	His	Asn	Arg	Ile	Trp	Glu	Ile	Gly	Ala	Asp	Thr	Phe	Ser	Gln
	180					185						190			
Leu	Ser	Ser	Leu	Gln	Ala	Leu	Asp	Leu	Arg	Trp	Asn	Ala	Ile	Arg	Ser
	195					200						205			
Ile	His	Pro	Glu	Ala	Phe	Ser	Thr	Leu	His	Ser	Leu	Val	Lys	Leu	Asp
	210				215						220				
Leu	Thr	Asp	Asn	Gln	Leu	Thr	Thr	Leu	Pro	Leu	Ala	Gly	Leu	Gly	Gly
225			230						235					240	
Leu	Met	His	Leu	Lys	Leu	Lys	Gly	Asn	Leu	Ala	Leu	Ser	Gln	Ala	Phe
			245					250						255	
Ser	Lys	Asp	Ser	Phe	Pro	Lys	Leu	Arg	Ile						

260

265

<210> 2695

<211> 2265

<212> DNA

<213> Homo sapiens

<400> 2695

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gagcagccca cccatgccgt gtgtgtgtg ggcacctga ctcagcttga catctgcagc
120
tctgccccctg aggactgcac gtccttcagc atcaacgcct cccaggggt ggtcgtggat
180
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240
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300
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360
gcggtggaaa tctccctgtg cgcagacatc acccgaccg gcaaagtga gcccaaccaga
420
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480
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540
cttgacagcg aagacctgca ggacatgtcg ctgatgacct tgagcacgaa gacccccaa
600
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660
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720
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780
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900
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1080
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 2160
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<210> 2696

<211> 663

<212> PRT

<213> Homo sapiens

<400> 2696

Met	Ala	Gln	Gly	Thr	Leu	Ile	Arg	Val	Thr	Pro	Glu	Gln	Pro	Thr	His
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Ala	Val	Cys	Val	Leu	Gly	Thr	Leu	Thr	Gln	Leu	Asp	Ile	Cys	Ser	Ser
			20					25					30		
Ala	Pro	Glu	Asp	Cys	Thr	Ser	Phe	Ser	Ile	Asn	Ala	Ser	Pro	Gly	Val
		35					40					45			
Val	Val	Asp	Ile	Ala	His	Ser	Pro	Pro	Ala	Lys	Lys	Lys	Ser	Thr	Gly
	50					55				60					
Ser	Ser	Thr	Trp	Pro	Leu	Asp	Pro	Gly	Val	Glu	Val	Thr	Leu	Thr	Met
65					70				75					80	
Lys	Ala	Ala	Ser	Gly	Ser	Thr	Gly	Asp	Gln	Lys	Val	Gln	Ile	Ser	Tyr
			85					90					95		
Tyr	Gly	Pro	Lys	Thr	Pro	Pro	Val	Lys	Ala	Leu	Leu	Tyr	Leu	Thr	Ala
		100						105					110		
Val	Glu	Ile	Ser	Leu	Cys	Ala	Asp	Ile	Thr	Arg	Thr	Gly	Lys	Val	Lys
		115					120					125			
Pro	Thr	Arg	Ala	Val	Lys	Asp	Gln	Arg	Thr	Trp	Thr	Trp	Gly	Pro	Cys

130		135		140	
Gly Gln Gly Ala Ile Leu Leu Val Asn Cys Asp Arg Asp Asn Leu Glu					
145		150		155	160
Ser Ser Ala Met Asp Cys Glu Asp Asp Glu Val Leu Asp Ser Glu Asp					
	165		170		175
Leu Gln Asp Met Ser Leu Met Thr Leu Ser Thr Lys Thr Pro Lys Asp					
	180		185		190
Phe Phe Thr Asn His Thr Leu Val Leu His Val Ala Arg Ser Glu Met					
	195		200		205
Asp Lys Val Arg Val Phe Gln Ala Thr Arg Gly Lys Leu Ser Ser Lys					
	210		215		220
Cys Ser Val Val Leu Gly Pro Lys Trp Pro Ser His Tyr Leu Met Val					
	225		230		235
Pro Gly Gly Lys His Asn Met Asp Phe Tyr Val Glu Ala Leu Ala Phe					
	245		250		255
Pro Asp Thr Asp Phe Pro Gly Leu Ile Thr Leu Thr Ile Ser Leu Leu					
	260		265		270
Asp Thr Ser Asn Leu Glu Leu Pro Glu Ala Val Val Phe Gln Asp Ser					
	275		280		285
Val Val Phe Arg Val Ala Pro Trp Ile Met Thr Pro Asn Thr Gln Pro					
	290		295		300
Pro Gln Glu Val Tyr Ala Cys Ser Ile Phe Glu Asn Glu Asp Phe Leu					
	305		310		315
Lys Ser Val Thr Thr Leu Ala Met Lys Ala Lys Cys Lys Leu Thr Ile					
	325		330		335
Cys Pro Glu Glu Glu Asn Met Asp Asp Gln Trp Met Gln Asp Glu Met					
	340		345		350
Glu Ile Gly Tyr Ile Gln Ala Pro His Lys Thr Leu Pro Val Val Phe					
	355		360		365
Asp Ser Pro Arg Asn Arg Gly Leu Lys Glu Phe Pro Ile Lys Arg Val					
	370		375		380
Met Gly Pro Asp Phe Gly Tyr Val Thr Arg Gly Pro Gln Thr Gly Gly					
	385		390		395
Ile Ser Gly Leu Asp Ser Phe Gly Asn Leu Glu Val Ser Pro Pro Val					
	405		410		415
Thr Val Arg Gly Lys Glu Tyr Pro Leu Gly Arg Ile Leu Phe Gly Asp					
	420		425		430
Ser Cys Tyr Pro Ser Asn Asp Ser Arg Gln Met His Gln Ala Leu Gln					
	435		440		445
Asp Phe Leu Ser Ala Gln Gln Val Gln Ala Pro Val Lys Leu Tyr Ser					
	450		455		460
Asp Trp Leu Ser Val Gly His Val Asp Glu Phe Leu Ser Phe Val Pro					
	465		470		475
Ala Pro Asp Arg Lys Gly Phe Arg Leu Leu Leu Ala Ser Pro Arg Ser					
	485		490		495
Cys Tyr Lys Leu Phe Gln Glu Gln Gln Asn Glu Gly His Gly Glu Ala					
	500		505		510
Leu Leu Phe Glu Gly Ile Lys Lys Lys Lys Gln Gln Lys Ile Lys Asn					
	515		520		525
Ile Leu Ser Asn Lys Thr Leu Arg Glu His Asn Ser Phe Val Glu Arg					
	530		535		540
Cys Ile Asp Trp Asn Arg Glu Leu Leu Lys Arg Glu Leu Gly Leu Ala					
	545		550		555
Glu Ser Asp Ile Ile Asp Ile Pro Gln Leu Phe Lys Leu Lys Glu Phe					

[illegible]

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1140
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1200
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<210> 2698

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2698

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Gly Arg Ala Asn His Phe Phe Thr Val Thr Asp Pro Arg Asn Ile Leu
      35           40           45
Leu Thr Asn Glu Gln Leu Glu Ser Ala Arg Lys Ile Val His Asp Tyr
      50           55           60
Arg Gln Gly Ile Val Pro Gly Leu Thr Glu Asn Glu Leu Trp Arg
      65           70           75           80
Ala Lys Tyr Ile Tyr Asp Ser Ala Phe His Pro Asp Thr Gly Glu Lys
      85           90           95
Met Ile Leu Ile Gly Arg Met Ser Ala Gln Val Pro Met Asn Met Thr
      100          105          110
Ile Thr Gly Cys Met Met Thr Phe Tyr Arg Thr Thr Pro Ala Val Leu
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Phe Trp Gln Trp Ile Asn Gln Ser Phe Asn Ala Val Val Asn Tyr Thr
      130          135          140
Asn Arg Ser Gly Asp Ala Pro Leu Thr Val Asn Glu Leu Gly Thr Ala
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Tyr Val Ser Ala Thr Thr Gly Ala Val Ala Thr Ala Leu Gly Leu Asn
      165          170          175
Ala Leu Thr Lys His Val Ser Pro Leu Ile Gly Arg Phe Val Pro Phe
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Ala Ala Val Ala Ala Ala Asn Cys Ile Asn Ile Pro Leu Met Arg Gln
      195          200          205
Arg Glu Leu Lys Val Gly Ile Pro Val Thr Asp Glu Asn Gly Asn Arg
      210          215          220
Leu Gly Glu Ser Ala Asn Ala Ala Lys Gln Ala Ile Thr Gln Val Val
      225          230          235          240
Val Ser Arg Ile Leu Met Ala Ala Pro Gly Met Ala Ile Pro Pro Phe
      245          250          255
Ile Met Asn Thr Leu Glu Lys Lys Ala Phe Leu Lys Arg Phe Pro Trp
      260          265          270
Met Ser Ala Pro Ile Gln Val Gly Leu Val Gly Phe Cys Leu Val Phe
      275          280          285
Ala Thr Pro Leu Cys Cys Ala Leu Phe Pro Gln Lys Ser Ser Met Ser
      290          295          300
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<210> 2699

<211> 974

<212> DNA

<213> Homo sapiens

<400> 2699

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<210> 2700

<211> 177

<212> PRT

<213> Homo sapiens

<400> 2700

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			20					25					30		
Thr	Gln	Pro	Ala	Asp	Val	Leu	Arg	Trp	Ser	Ala	Gly	Tyr	Phe	Ser	Ala
		35				40					45				
Leu	Ser	Arg	Gly	Asp	Pro	Leu	Pro	Val	Lys	Asp	Arg	Met	Glu	Met	Pro
		50				55					60				
Val	Ala	Thr	Gln	Lys	Thr	Asp	Thr	Gly	Leu	Thr	Gln	Gly	Leu	Leu	Lys
65				70					75				80		
Val	Leu	His	Lys	Gln	Cys	His	His	Lys	Arg	Tyr	Val	Glu	Leu	Thr	Asp
			85					90					95		
Leu	Glu	Gln	Lys	Trp	Lys	Asn	Leu	Cys	Leu	Pro	Lys	Glu	Lys	Phe	Lys
			100					105					110		
Ala	Leu	Leu	Gln	Leu	Asp	Pro	Cys	Glu	Asn	Lys	Ile	Lys	Trp	Ile	Asn

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      115              120              125
Phe Leu Ala Leu Gly Cys Ser Met Leu Gly Gly Ser Leu Asn Thr Ala
  130              135              140
Leu Lys His Leu Cys Glu Ile Leu Thr Asp Asp Pro Glu Ala Gly Pro
  145              150              155              160
Leu Ala Ser Pro Ser Arg Arg Phe Pro Thr Phe Thr Ala Thr Trp Pro
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<210> 2701

<211> 646

<212> DNA

<213> Homo sapiens

<400> 2701

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<210> 2702

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2702

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Leu Gly Pro Gly Asp Gln Glu Ser Arg Trp Lys Gln Tyr Leu Glu Asp
      20              25              30
Glu Arg Ile Ala Leu Phe Leu Gln Asn Glu Glu Phe Met Lys Glu Leu
      35              40              45
Gln Arg Asn Arg Asp Phe Leu Leu Ala Leu Glu Arg Asp Arg Leu Lys
      50              55              60
Tyr Glu Ser Gln Lys Ser Lys Ser Ser Ser Val Ala Val Gly Asn Asp

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<210> 2705
 <211> 843
 <212> DNA
 <213> Homo sapiens

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 180
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<210> 2706
 <211> 251
 <212> PRT
 <213> Homo sapiens

<400> 2706
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 35 40 45
 Ala Ser Arg Asn Ile Val Gln Asn Tyr Arg Ala Gly Val Val Thr Pro
 50 55 60
 Gly Ile Thr Glu Asp Gln Leu Trp Arg Ala Lys Tyr Val Tyr Asp Ser
 65 70 75 80
 Ala Phe His Pro Asp Thr Gly Glu Lys Val Val Leu Ile Gly Arg Met

										85					90					95									
Ser	Ala	Gln	Val	Pro	Met	Asn	Met	Thr	Ile	Thr	Gly	Cys	Met	Leu	Thr														
										100					105					110									
Phe	Tyr	Arg	Lys	Thr	Pro	Thr	Val	Val	Phe	Trp	Gln	Trp	Val	Asn	Gln														
										115					120					125									
Ser	Phe	Asn	Ala	Ile	Val	Asn	Tyr	Ser	Asn	Arg	Ser	Gly	Asp	Thr	Pro														
										130					135					140									
Ile	Thr	Val	Arg	Gln	Leu	Gly	Thr	Ala	Tyr	Val	Ser	Ala	Thr	Thr	Gly														
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Ala	Val	Ala	Thr	Ala	Leu	Gly	Leu	Lys	Ser	Leu	Thr	Lys	His	Leu	Pro														
										165					170					175									
Pro	Leu	Val	Gly	Arg	Phe	Val	Pro	Phe	Ala	Ala	Val	Ala	Ala	Ala	Asn														
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Cys	Ile	Asn	Ile	Pro	Leu	Met	Arg	Gln	Arg	Glu	Leu	Gln	Val	Gly	Ile														
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Pro	Val	Thr	Asp	Glu	Ala	Gly	Gln	Arg	Leu	Gly	His	Ser	Val	Thr	Ala														
										210					215					220									
Ala	Lys	Gln	Gly	Ile	Phe	Gln	Val	Val	Val	Ser	Arg	Ile	Gly	Met	Ala														
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<212> DNA
<213> Homo sapiens
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780

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<210> 2708

<211> 337

<212> PRT

<213> Homo sapiens

<400> 2708

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Leu	Thr	Gln	Pro	Thr	Tyr	Thr	Gly	Ala	Ile	Ile	Ser	Ile	Cys	Cys	Cys
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Leu	Phe	Ile	Leu	Phe	Leu	Phe	Leu	Ser	Glu	Leu	Thr	Gly	Phe	Ile	Thr
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Thr	Glu	Val	Val	Asn	Glu	Leu	Tyr	Val	Asp	Asp	Pro	Asp	Lys	Asp	Ser
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Gly	Gly	Lys	Ile	Asp	Val	Ser	Leu	Asn	Ile	Ser	Leu	Pro	Asn	Leu	His
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Cys	Glu	Leu	Val	Gly	Leu	Asp	Ile	Gln	Asp	Glu	Met	Gly	Arg	His	Glu
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Val	Gly	His	Ile	Asp	Asn	Ser	Met	Lys	Ile	Pro	Leu	Asn	Asn	Gly	Ala
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			165						170					175	
Phe	His	Val	Ser	Thr	His	Ser	Ala	Thr	Ala	Gln	Pro	Gln	Asn	Pro	Asp
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Met	Thr	His	Val	Ile	His	Lys	Leu	Ser	Phe	Gly	Asp	Thr	Leu	Gln	Val
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	210						215				220				
Thr	Ser	Asn	Pro	Leu	Ala	Ser	His	Asp	Tyr	Ile	Leu	Lys	Ile	Val	Pro

225 230 235 240
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 Thr Val Ala Asn Lys Glu Tyr Val Ala Tyr Ser His Thr Gly Arg Ile
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 Ile Pro Ala Ile Trp Phe Arg Tyr Asp Leu Ser Pro Ile Thr Val Lys
 275 280 285
 Tyr Thr Glu Arg Arg Gln Pro Leu Tyr Arg Phe Ile Thr Thr Ile Cys
 290 295 300
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 325 330 335
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<210> 2709

<211> 984

<212> DNA

<213> Homo sapiens

<400> 2709

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<210> 2710

<211> 242

<212> PRT

<213> Homo sapiens

<400> 2710

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Leu Ser Ala Lys Val Val Thr Asn Ala Arg Ser Pro Gly Ala Lys Cys
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Tyr Gly Ile Val Thr Met Ser Ser Ser Thr Glu Val Ser Arg Cys Ile
      130          135          140
Ala His Leu His Arg Thr Glu Leu His Gly Gln Leu Ile Ser Val Glu
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Lys Val Lys Gly Asp Pro Ser Lys Lys Glu Met Lys Lys Glu Asn Asp
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Glu Lys Ser Ser Ser Arg Ser Ser Gly Asp Lys Lys Asn Thr Ser Asp
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Arg Ser Ser Lys Thr Gln Ala Ser Val Lys Lys Glu Glu Lys Arg Ser
      195          200          205
Ser Glu Lys Ser Glu Lys Lys Glu Ser Lys Asp Thr Lys Lys Ile Glu
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<211> 6536

<212> DNA

<213> Homo sapiens

<400> 2711

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<211> 2096

<212> PRT

<213> Homo sapiens

<400> 2712

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 35          40          45
Glu Glu Val Ala Pro Val Leu Gln Gln Thr Leu Leu Gln Asp Asn Leu
 50          55          60
Leu Gly Arg Val His Phe Asp Gln Phe Lys Glu Ala Leu Ile Leu Ile
 65          70          75          80
Leu Ser Arg Thr Leu Ser Asp Glu Glu His Phe Gln Glu Pro Asp Cys
 85          90          95
Ser Leu Glu Ala Gln Pro Arg Tyr Val Arg Gly Glu Lys Pro Tyr Gly
 100          105          110
Arg Arg Ser Leu Pro Glu Phe Gln Glu Ser Val Glu Glu Phe Pro Glu
 115          120          125
Val Thr Val Ile Glu Pro Leu Asp Glu Glu Ala Arg Pro Ser His Ile
 130          135          140
Pro Ala Gly Asp Cys Ser Glu His Trp Lys Thr Gln Arg Ser Glu Glu
 145          150          155          160
Tyr Glu Ala Glu Gly Gln Leu Arg Phe Trp Asn Pro Asp Asp Leu Asn
 165          170          175
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 195          200          205
Asn Arg Lys Lys Leu Val Ser Ile Cys Glu Gln Tyr Gly Leu Gln Asn
 210          215          220
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 225          230          235          240
Gly Thr Met Ser Val Glu Asp Phe Phe Tyr Gly Leu Phe Lys Asn Gly
 245          250          255
Lys Ser Leu Thr Pro Ser Ala Ser Thr Pro Tyr Arg Gln Leu Lys Arg
 260          265          270
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Ser Ser Ala Thr Thr Ser Thr Ile Gly Phe Arg Val Phe Ser Cys Leu
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 305          310          315          320
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 325          330          335
Phe Ser Leu Asp Gly Asn Ile Asn Leu Thr Glu Leu Thr Leu Ala Leu
 340          345          350
Glu Asn Glu Leu Leu Val Thr Lys Asn Ser Ile His Gln Ala Ala Leu
 355          360          365
Ala Ser Phe Lys Ala Glu Ile Arg His Leu Leu Glu Arg Val Asp Gln
 370          375          380
Val Val Arg Glu Lys Arg Ser Tyr Gly Arg Ile Trp Thr Ala Glu Lys
 385          390          395          400
Leu Lys Ser Leu Met Ala Ser Glu Val Asp Asp His Asp Ala Ala Ile

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1951

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870	875	880
Leu Lys Glu Thr Leu Lys	Arg Glu Lys Thr Thr Ser	Leu Val Leu Thr
885	890	895
Gln Glu Arg Glu Met Leu	Glu Lys Thr Tyr Lys Asp	His Leu Asn Ser
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Met Val Val Glu Arg Gln	Gln Leu Leu Gln Asp Leu	Glu Asp Leu Arg
915	920	925
Asn Val Ser Glu Thr Gln	Gln Ser Leu Leu Ser Asp	Gln Ile Leu Glu
930	935	940
Leu Lys Ser Ser His Lys	Arg Glu Leu Arg Glu Arg	Glu Glu Val Leu
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Cys Gln Gln Gly Val Ser	Glu Gln Leu Ala Ser Gln	Arg Leu Glu Arg
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Glu Arg Ala Glu Met Ser	Thr Glu Ile Ser Arg Leu	Gln Ser Lys Ile
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Lys Glu Met Gln Gln Ala	Thr Ser Pro Leu Ser Met	Leu Gln Ser Gly
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Cys Gln Val Ile Gly Glu	Glu Glu Glu Val Glu Gly	Asp Gly Ala Leu Ser
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Leu Leu Gln Lys Gly Glu	Gln Leu Leu Glu Glu Asn	Gly Asp Val Leu
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Leu Ser Leu Gln Arg Ala	His Glu Gln Ala Val Lys	Glu Asn Val Lys
1075	1080	1085
Met Ala Thr Glu Ile Ser	Arg Leu Gln Gln Arg Leu	Gln Lys Leu Glu
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Pro Gly Leu Val Met Ser	Ser Cys Leu Asp Glu Pro	Ala Thr Glu Phe
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Glu Asp Asp Glu Val Arg	Asp Leu Gly Ser Thr Gly	Thr Ser Ser Val
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Phe Ser Glu Leu Glu Asn	Ser Glu Glu Thr Arg Thr	Glu Ser Trp Glu
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Ala Ser Pro Arg Tyr Lys	Leu Leu Tyr Glu Asp Val	Ser Arg Glu Asn
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Trp Ser Ser Gly Val Thr Ala Ala Tyr Gly Lys Xaa Ser Leu Glu Asn			
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<210> 2713

<211> 2066

<212> DNA

<213> Homo sapiens

<400> 2713

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 2066

<210> 2714
 <211> 214
 <212> PRT
 <213> Homo sapiens

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 Leu Val Glu Thr Ser Gly Ile Ser Ile Tyr Arg Leu Leu Asp Lys Lys
 35 40 45
 Thr Gly Leu Tyr Glu Tyr Lys Val Phe Gly Val Leu Glu Asp Cys Ser
 50 55 60
 Pro Thr Leu Leu Ala Asp Ile Tyr Met Asp Ser Asp Tyr Arg Lys Gln
 65 70 75 80
 Trp Asp Gln Tyr Val Lys Glu Leu Tyr Glu Gln Glu Cys Asn Gly Glu
 85 90 95
 Thr Val Val Tyr Trp Glu Val Lys Tyr Pro Phe Pro Met Ser Asn Arg
 100 105 110
 Asp Tyr Val Tyr Leu Arg Gln Arg Arg Asp Leu Asp Met Glu Gly Arg
 115 120 125
 Lys Ile His Val Ile Leu Ala Arg Ser Thr Ser Met Pro Gln Leu Gly
 130 135 140
 Glu Arg Ser Gly Val Ile Arg Val Lys Gln Tyr Lys Gln Ser Leu Ala
 145 150 155 160
 Ile Glu Ser Asp Gly Lys Lys Gly Ser Lys Val Phe Met Tyr Tyr Phe
 165 170 175
 Asp Asn Pro Gly Gly Gln Ile Pro Ser Trp Leu Ile Asn Trp Ala Ala
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 Lys Asn Gly Val Pro Asn Phe Leu Lys Asp Met Ala Arg Ala Cys Gln
 195 200 205
 Asn Tyr Leu Lys Lys Thr
 210

<210> 2715
 <211> 378
 <212> DNA
 <213> Homo sapiens

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 240
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<210> 2716
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 2716
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 Gln Arg Gly Asp Leu Ser Asp Val Glu Glu Glu Glu Glu Glu Met
 35 40 45
 Asp Val Asp Glu Ala Thr Gly Ala Val Lys Lys His Asn Gly Val Gly
 50 55 60
 Gly Ser Pro Pro Lys Ser Lys Leu Leu Phe Ser Asn Thr Ala Ala Gln
 65 70 75 80
 Lys Leu Arg Gly Met Asp Glu Val Tyr Asn Leu Phe Tyr Val Asn Asn
 85 90 95
 Asn Trp Tyr Ile Phe Met Arg Leu His Gln Ile Leu Cys Leu Arg Leu
 100 105 110
 Leu Arg Ile Cys Ser Gln Ala Glu Arg Gln Ile Glu Glu Glu
 115 120 125

<210> 2717
 <211> 2076
 <212> DNA
 <213> Homo sapiens

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 120

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540
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720
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1740

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 1920
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 1980
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<210> 2718

<211> 110

<212> PRT

<213> Homo sapiens

<400> 2718

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		20					25						30		
Glu	Gly	Pro	Arg	Pro	Glu	Asn	Thr	Leu	Gly	Leu	Ser	Ser	Pro	Ala	Gln
		35				40					45				
Thr	Thr	Gly	Glu	Gly	Ala	Gly	His	Arg	Pro	Leu	Thr	Ile	Leu	His	Pro
	50					55				60					
Lys	Thr	Gly	Gly	Gln	Gly	Ser	Asp	Ala	Thr	Leu	Leu	Phe	Val	Lys	Tyr
65				70					75					80	
Gly	Thr	Thr	Phe	Phe	Val	Leu	Phe	Glu	Val	Ser	Ser	Gly	Ser	Lys	Leu
			85					90					95		
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<210> 2719

<211> 546

<212> DNA

<213> Homo sapiens

<400> 2719

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<210> 2720
 <211> 182
 <212> PRT
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<400> 2720
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 35 40 45
 Leu Asp Val Pro Leu Glu Gln Glu Met Ala Lys Glu Asp Pro Val Cys
 50 55 60
 Ala Pro Glu Ser Met Gly Ser Glu Asp Met Leu Phe Met Leu Tyr Thr
 65 70 75 80
 Ser Gly Ser Thr Gly Met Pro Lys Gly Ile Val His Thr Gln Ala Gly
 85 90 95
 Tyr Leu Leu Tyr Ala Ala Leu Thr His Lys Leu Val Phe Asp His Gln
 100 105 110
 Pro Gly Asp Ile Phe Gly Cys Val Ala Asp Ile Gly Trp Ile Thr Gly
 115 120 125
 His Ser Tyr Val Val Tyr Gly Pro Leu Cys Asn Gly Ala Thr Ser Val
 130 135 140
 Leu Phe Glu Ser Thr Pro Val Tyr Pro Asn Ala Gly Arg Tyr Trp Glu
 145 150 155 160
 Thr Val Glu Arg Leu Lys Ile Asn Gln Phe Tyr Gly Ala Pro Thr Ala
 165 170 175
 Val Arg Leu Leu Leu Lys
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<210> 2721
 <211> 5912
 <212> DNA
 <213> Homo sapiens

<400> 2721
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 gtcatatatg gaaagagcat gtttggtaca tgtaaaagct ttactgatat acagatatatc
 5700
 taatgtttga agatgctgtt ctttgcaagt gtacagtttt caaatgttgt taccagtga
 5760
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 aagaatcatg gctatatttc atatcaactg tatattgaaa gtgaagggaa atgattaata
 5880
 caagggtttg taacaaaaaa aaaaaaaaaa aa
 5912

<210> 2722

<211> 508

<212> PRT

<213> Homo sapiens

<400> 2722

Arg	Gln	Leu	Leu	Ser	Tyr	Ala	Leu	Ile	His	Pro	Ala	Thr	Ser	Leu	Glu
1			5						10					15	
Asp	Arg	Ser	Ala	Leu	Ala	Met	Trp	Leu	Asn	His	Leu	Glu	Asp	Arg	Thr
	20							25				30			
Ser	Thr	Ser	Phe	Gly	Gly	Gln	Asn	Arg	Gly	Arg	Ser	Asp	Ser	Val	Asp
	35					40					45				
Tyr	Gly	Gln	Thr	His	Tyr	Tyr	His	Gln	Arg	Gln	Asn	Ser	Asp	Asp	Lys
	50				55					60					
Leu	Asn	Gly	Trp	Gln	Asn	Ser	Arg	Asp	Ser	Gly	Ile	Cys	Ile	Asn	Ala
65				70				75						80	
Ser	Asn	Trp	Gln	Asp	Lys	Ser	Met	Gly	Cys	Glu	Asn	Gly	His	Val	Pro
		85						90					95		
Leu	Tyr	Ser	Ser	Ser	Ser	Val	Pro	Thr	Thr	Ile	Asn	Thr	Ile	Gly	Thr
	100							105					110		
Ser	Thr	Ser	Thr	Asn	Val	Pro	Ala	Trp	Leu	Lys	Ser	Leu	Arg	Leu	His
	115					120						125			
Lys	Tyr	Ala	Ala	Leu	Phe	Ser	Gln	Met	Thr	Tyr	Glu	Glu	Met	Met	Ala
	130				135						140				
Leu	Thr	Glu	Cys	Gln	Leu	Glu	Ala	Gln	Asn	Val	Thr	Lys	Gly	Ala	Arg
145					150					155				160	
His	Lys	Ile	Val	Ile	Ser	Ile	Gln	Lys	Leu	Lys	Glu	Arg	Gln	Asn	Leu

165 170 175
 Leu Lys Ser Leu Glu Arg Asp Ile Ile Glu Gly Gly Ser Leu Arg Ile
 180 185 190
 Pro Leu Gln Glu Leu His Gln Met Ile Leu Thr Pro Ile Lys Ala Tyr
 195 200 205
 Ser Ser Pro Ser Thr Thr Pro Glu Ala Arg Arg Arg Glu Pro Gln Ala
 210 215 220
 Pro Arg Gln Pro Ser Leu Met Gly Pro Glu Ser Gln Ser Pro Asp Cys
 225 230 235 240
 Lys Asp Gly Ala Ala Ala Thr Gly Ala Thr Ala Thr Pro Ser Ala Gly
 245 250 255
 Ala Ser Gly Gly Leu Gln Pro His Gln Leu Ser Ser Cys Asp Gly Glu
 260 265 270
 Leu Ala Val Ala Pro Leu Pro Glu Gly Asp Leu Pro Gly Gln Phe Thr
 275 280 285
 Arg Val Met Gly Lys Val Cys Thr Gln Leu Leu Val Ser Arg Pro Asp
 290 295 300
 Glu Glu Asn Ile Ser Ser Tyr Leu Gln Leu Ile Asp Lys Cys Leu Ile
 305 310 315 320
 His Glu Ala Phe Thr Glu Thr Gln Lys Lys Arg Leu Leu Ser Trp Lys
 325 330 335
 Gln Gln Val Gln Lys Leu Phe Arg Ser Phe Pro Arg Lys Thr Leu Leu
 340 345 350
 Asp Ile Ser Gly Tyr Arg Gln Gln Arg Asn Arg Gly Phe Gly Gln Ser
 355 360 365
 Asn Ser Leu Pro Thr Ala Gly Ser Val Gly Gly Gly Met Gly Arg Arg
 370 375 380
 Asn Pro Arg Gln Tyr Gln Ile Pro Ser Arg Asn Val Pro Ser Ala Arg
 385 390 395 400
 Leu Gly Leu Leu Gly Thr Ser Gly Phe Val Ser Ser Asn Gln Arg Asn
 405 410 415
 Thr Thr Ala Thr Pro Thr Ile Met Lys Gln Gly Arg Gln Asn Leu Trp
 420 425 430
 Phe Ala Asn Pro Gly Gly Ser Asn Ser Met Pro Ser Arg Thr His Ser
 435 440 445
 Ser Val Gln Arg Thr Arg Ser Leu Pro Val His Thr Ser Pro Gln Asn
 450 455 460
 Met Leu Met Phe Gln Gln Pro Glu Phe Gln Leu Pro Val Thr Glu Pro
 465 470 475 480
 Asp Ile Asn Asn Arg Leu Glu Ser Leu Cys Leu Ser Met Thr Glu His
 485 490 495
 Ala Leu Gly Asp Gly Val Asp Arg Thr Ser Thr Ile
 500 505

<210> 2723

<211> 1221

<212> DNA

<213> Homo sapiens

<400> 2723

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120

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cccaacacat tctggagtgc tgctgaggat gggcttatcc gccagtatga ccttcgagag
180
aacagcaaac actcggaggt gctgattgac ctgacagagt actgtggcca gctgggtggag
240
gccaaagtgc tcaactgtcaa cccccaggac aacaactgcc tggcagttgg ggccagcggg
300
cccttcgtga ggctctatga catccgcatg atccataacc acagaaagag catgaagcag
360
agcccttcag cgggtgtgca caccttctgt gaccggcaga aacccttcc ggacggtgca
420
gcccagtatt acgtagcagg tcacctgcca gtgaagcttc ctgactacaa caaccgtttg
480
agagtgtctg ttgccaccta tgtgaccttc agccccaatg gcacagagct actagtcaac
540
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600
ctctgccta gaaaatgcca ctctcgggg gaagtccaga atggcaagat gtccaccaac
660
ggtgtgtcca acggtgtgtc caatggcctg caccttcata gcaatggctt ccggctgccc
720
gagagttagg gacatgtcag cccccaagta gagctaccac catacctgga gcgtgtgaaa
780
cagcaagcca atgaggcttt tgcctgccag cagtggacct aagccattca gctttacagc
840
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900
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960
tcctaaacc catgccacct gaaggcacac ttctgcctgg ccgctgcct ctttgagctc
1020
aagtatgtgg ctgaagccct ggagtgcctg gacgacttca aagggaaatt tccggagcag
1080
gcccacagca gcgcttgtga tgcattgggc cgcgacatca cagctgccct cttctctaaa
1140
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1200
agccgcaagg gatgcacgcg t
1221

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<210> 2724

<211> 404

<212> PRT

<213> Homo sapiens

<400> 2724

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Gly Ala Ala Asp Ser Lys Val His Val His Asp Leu Thr Val Lys Glu
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Thr Ile His Met Phe Gly Asp His Thr Asn Arg Val Lys Arg Ile Ala
          20          25          30
Thr Ala Pro Met Trp Pro Asn Thr Phe Trp Ser Ala Ala Glu Asp Gly
          35          40          45
Leu Ile Arg Gln Tyr Asp Leu Arg Glu Asn Ser Lys His Ser Glu Val
          50          55          60
Leu Ile Asp Leu Thr Glu Tyr Cys Gly Gln Leu Val Glu Ala Lys Cys

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65          70          75          80
Leu Thr Val Asn Pro Gln Asp Asn Asn Cys Leu Ala Val Gly Ala Ser
          85          90          95
Gly Pro Phe Val Arg Leu Tyr Asp Ile Arg Met Ile His Asn His Arg
          100          105          110
Lys Ser Met Lys Gln Ser Pro Ser Ala Gly Val His Thr Phe Cys Asp
          115          120          125
Arg Gln Lys Pro Leu Pro Asp Gly Ala Ala Gln Tyr Tyr Val Ala Gly
          130          135          140
His Leu Pro Val Lys Leu Pro Asp Tyr Asn Asn Arg Leu Arg Val Leu
145          150          155          160
Val Ala Thr Tyr Val Thr Phe Ser Pro Asn Gly Thr Glu Leu Leu Val
          165          170          175
Asn Met Gly Gly Glu Gln Val Tyr Leu Phe Asp Leu Thr Tyr Lys Gln
          180          185          190
Arg Pro Tyr Thr Phe Leu Leu Pro Arg Lys Cys His Ser Ser Gly Glu
          195          200          205
Val Gln Asn Gly Lys Met Ser Thr Asn Gly Val Ser Asn Gly Val Ser
          210          215          220
Asn Gly Leu His Leu His Ser Asn Gly Phe Arg Leu Pro Glu Ser Arg
225          230          235          240
Gly His Val Ser Pro Gln Val Glu Leu Pro Pro Tyr Leu Glu Arg Val
          245          250          255
Lys Gln Gln Ala Asn Glu Ala Phe Ala Cys Gln Gln Trp Thr Gln Ala
          260          265          270
Ile Gln Leu Tyr Ser Lys Ala Val Gln Arg Ala Pro His Asn Ala Met
          275          280          285
Leu Tyr Gly Asn Arg Ala Ala Tyr Met Lys Arg Lys Trp Asp Gly
          290          295          300
Asp His Tyr Asp Ala Leu Arg Asp Cys Leu Lys Ala Ile Ser Leu Asn
305          310          315          320
Pro Cys His Leu Lys Ala His Phe Arg Leu Ala Arg Cys Leu Phe Glu
          325          330          335
Leu Lys Tyr Val Ala Glu Ala Leu Glu Cys Leu Asp Asp Phe Lys Gly
          340          345          350
Lys Phe Pro Glu Gln Ala His Ser Ser Ala Cys Asp Ala Leu Gly Arg
          355          360          365
Asp Ile Thr Ala Ala Leu Phe Ser Lys Asn Asp Gly Glu Glu Lys Lys
          370          375          380
Gly Pro Gly Gly Gly Ala Pro Val Arg Leu Arg Ser Thr Ser Arg Lys
385          390          395          400
Gly Cys Thr Arg

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<210> 2725

<211> 856

<212> DNA

<213> Homo sapiens

<400> 2725

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ctgaccccg cggccctgcc cgccctccc tccagcatca tggccagccc aagaaccagg

120

aaggttctta aagaagtcag ggtgcaggat gagaacaacg tttgttttga gtgtggcgcg
 180
 ttcaatcctc agtgggtcag tgtgacctac ggcattctgga tctgcctgga gtgtcgggg
 240
 agacaccgcg ggcttggggt tcacctcagc tttgtgcgct ctgttactat ggacaagtgg
 300
 aaggacattg agcttgagaa gatgaaagct ggtgggaatg ctaagttccg agagtctctg
 360
 gagtctcagg aggattacga tccttgctgg tccttgccagg agaagtacaa cagcagagcc
 420
 gcggccctct ttagggataa ggtggctcgt ctggccgaag gcagagagtg gtctctggag
 480
 tcattcacctg cccagaactg gacccacact cagcccagga cgctgccgtc catggtgcac
 540
 cggtagctgc tcctcgtggg gccttagtac agtttccact gggtcctgaa cttagtagat
 600
 tgggtttccc acagaattct ccccttcttt gctgttgatga cagctctttt cccagaagtc
 660
 agtgggaaaa acagcttttt aaaattgcc aacaataca agcttttagt aaatttgac
 720
 acccatagag ctgtctcaga tagcgcccca ggtaagctcc gcacgccttc cagggtgtga
 780
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 840
 tgtctgccct tcacgc
 856

<210> 2726

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2726

Met	Ala	Ser	Pro	Arg	Thr	Arg	Lys	Val	Leu	Lys	Glu	Val	Arg	Val	Gln
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Asp	Glu	Asn	Asn	Val	Cys	Phe	Glu	Cys	Gly	Ala	Phe	Asn	Pro	Gln	Trp
		20						25				30			
Val	Ser	Val	Thr	Tyr	Gly	Ile	Trp	Ile	Cys	Leu	Glu	Cys	Ser	Gly	Arg
		35					40				45				
His	Arg	Gly	Leu	Gly	Val	His	Leu	Ser	Phe	Val	Arg	Ser	Val	Thr	Met
		50				55					60				
Asp	Lys	Trp	Lys	Asp	Ile	Glu	Leu	Glu	Lys	Met	Lys	Ala	Gly	Gly	Asn
65				70					75					80	
Ala	Lys	Phe	Arg	Glu	Phe	Leu	Glu	Ser	Gln	Glu	Asp	Tyr	Asp	Pro	Cys
			85					90					95		
Trp	Ser	Leu	Gln	Glu	Lys	Tyr	Asn	Ser	Arg	Ala	Ala	Ala	Leu	Phe	Arg
		100					105						110		
Asp	Lys	Val	Val	Ala	Leu	Ala	Glu	Gly	Arg	Glu	Trp	Ser	Leu	Glu	Ser
	115						120					125			
Ser	Pro	Ala	Gln	Asn	Trp	Thr	Pro	Pro	Gln	Pro	Arg	Thr	Leu	Pro	Ser
	130					135					140				
Met	Val	His	Arg												
145															

<210> 2727
 <211> 1119
 <212> DNA
 <213> Homo sapiens

<400> 2727
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 120
 taaatctggc atattaaatt gtgctgtaaa tagatttgta tattttcttt tttgagtact
 180
 atgatagggtg aaatgggtatg actataaaaa ggatttggtt ctttttgtct cctggaatga
 240
 catgatgcct ttctagagaa agaaaaattg caggctacag gaaaatgata aaaactactg
 300
 gattcattta gactattcga tttaggaagg tacaaccact tctttaacat caagctaaaa
 360
 gtgggggaaa gtctcagtct cccaggtagg tctcctctca cactgtctct ggtggcaggc
 420
 gctgtttata catgcccgtc atcgtctctg ctgcactgta gatcatctgc cgacgggaca
 480
 tcccagtaaa tgccatgtgc caatcagtcg ggctgacatt cagtaaaactc ttttccagga
 540
 cttcacccac tgtcaccaaa aggcctgacc acctcagatt atagtcctgg ggagttagac
 600
 tttgagcctg ctgtacaaat tccaaaggca ctggtgtggc ttgtgtaaat gtttctagat
 660
 gaatgccatg gacaggatct tcaaccacca aacaaccaat gtcaaaccat ttgtcaggca
 720
 gcaattctgc aatgaagttt tctactgaca cagctgtctg tttttcatgg atcacccag
 780
 ttcgacgcaa gctatctatc cgttctctgag caccttttaa tccagctgca tagccactg
 840
 gttgtggggc aatattggac tgtccagcct cccctacaac cacagctagg ccgaagacct
 900
 cctggaaggc atctcggaca gcagccactt tcacttcttt atttgaggtc actacaatat
 960
 ccagttcacc tccagatttg atatagggag ccatgccagg gtccagcgtt gtaatcatgc
 1020
 tttctactga atgttttgc ttatcaagca cagacttcac cataggattc ccagccacac
 1080
 ccttaataaa accccagatt ccaccagcag atgcttcat
 1119

<210> 2728
 <211> 221
 <212> PRT
 <213> Homo sapiens

<400> 2728
 Met Val Lys Ser Val Leu Asp Lys Thr Lys His Ser Val Glu Ser Met
 1 5 10 15
 Ile Thr Thr Leu Asp Pro Gly Met Ala Pro Tyr Ile Lys Ser Gly Gly

```

      20      25      30
Glu Leu Asp Ile Val Val Thr Ser Asn Lys Glu Val Lys Val Ala Ala
      35      40      45
Val Arg Asp Ala Phe Gln Glu Val Phe Gly Leu Ala Val Val Val Gly
      50      55      60
Glu Ala Gly Gln Ser Asn Ile Ala Pro Gln Pro Val Gly Tyr Ala Ala
      65      70      75      80
Gly Leu Lys Gly Ala Gln Glu Arg Ile Asp Ser Leu Arg Arg Thr Gly
      85      90      95
Val Ile His Glu Lys Gln Thr Ala Val Ser Val Glu Asn Phe Ile Ala
      100      105      110
Glu Leu Leu Pro Asp Lys Trp Phe Asp Ile Gly Cys Leu Val Val Glu
      115      120      125
Asp Pro Val His Gly Ile His Leu Glu Thr Phe Thr Gln Ala Thr Pro
      130      135      140
Val Pro Leu Glu Phe Val Gln Gln Ala Gln Ser Leu Thr Pro Gln Asp
      145      150      155      160
Tyr Asn Leu Arg Trp Ser Gly Leu Leu Val Thr Val Gly Glu Val Leu
      165      170      175
Glu Lys Ser Leu Leu Asn Val Ser Arg Thr Asp Trp His Met Ala Phe
      180      185      190
Thr Gly Met Ser Arg Arg Gln Met Ile Tyr Ser Ala Ala Arg Ala Ile
      195      200      205
Ala Gly Met Tyr Lys Gln Arg Leu Pro Pro Arg Thr Val
      210      215      220

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<210> 2729

<211> 393

<212> DNA

<213> Homo sapiens

<400> 2729

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atgcagcccc agcagtgggtg aggcactact ttcttgaaga gttgtgcac catgtaggtc
120
agctgctctg ccacgagatc ttctgagaag cacgtgaatt ctgctgactc tccaccctcc
180
agttcctctt cctcttccat actaagggcc tggcttgacc agtgtgcaga agacttccga
240
gagccccctc acttccccctg cttacagaaa ctgctggatt atctcacacg gatgatgccg
300
ggctctgacc cagaaagaag agcacaaaat cttcttgagc agtttcagaa gcaagaagtg
360
gaaactgaca atgggcttcc caacacgac tcc
393

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<210> 2730

<211> 92

<212> PRT

<213> Homo sapiens

<400> 2730

Val Ser Cys Ser Ala Thr Arg Ser Ser Glu Lys His Val Asn Ser Ala

```

      1           5           10           15
Asp Ser Pro Pro Ser Ser Ser Ser Ser Ser Ser Ile Leu Arg Ala Trp
      20           25           30
Leu Asp Gln Cys Ala Glu Asp Phe Arg Glu Pro Pro His Phe Pro Cys
      35           40           45
Leu Gln Lys Leu Leu Asp Tyr Leu Thr Arg Met Met Pro Gly Ser Asp
      50           55           60
Pro Glu Arg Arg Ala Gln Asn Leu Leu Glu Gln Phe Gln Lys Gln Glu
      65           70           75           80
Val Glu Thr Asp Asn Gly Leu Pro Asn Thr Ile Ser
      85           90

```

<210> 2731

<211> 447

<212> DNA

<213> Homo sapiens

<400> 2731

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ncgcctccga cctgaaagca cgctccacetc tgcggctcct acctgggtgc aatcgagtta
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aatggctgat aagcagatca gcctgccagc caagctcatc aatggcggca tcgcggtctg
120
atcgggtgtca cctgcgtgtt tcccatcgac ctggccaaga ccaggctgca gaaccagcag
180
aacggccagc gcgtgtacac gagcatgtcc gactgcctca tcaagaccgt ccgctccgag
240
ggctacttcg gcattgtaccg gggagctgct gtgaacttga ccctcgtcac ccccgagaag
300
gccatcaagc tggcagccaa cgacttcttc cgacatcagc tctctaagga cgggcagaag
360
ctgaccctgc ttaaagagat gctggcgggc tgtggggctg gcacctgcca ggtgatcgtg
420
accacgcca tggagatgct gaagatc
447

```

<210> 2732

<211> 125

<212> PRT

<213> Homo sapiens

<400> 2732

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Ala Asp Gln Pro Ala Ser Gln Ala His Gln Trp Arg His Arg Gly Leu
 1           5           10           15
Ile Gly Val Thr Cys Val Phe Pro Ile Asp Leu Ala Lys Thr Arg Leu
 20           25           30
Gln Asn Gln Gln Asn Gly Gln Arg Val Tyr Thr Ser Met Ser Asp Cys
 35           40           45
Leu Ile Lys Thr Val Arg Ser Glu Gly Tyr Phe Gly Met Tyr Arg Gly
 50           55           60
Ala Ala Val Asn Leu Thr Leu Val Thr Pro Glu Lys Ala Ile Lys Leu
 65           70           75           80
Ala Ala Asn Asp Phe Phe Arg His Gln Leu Ser Lys Asp Gly Gln Lys
 85           90           95
Leu Thr Leu Leu Lys Glu Met Leu Ala Gly Cys Gly Ala Gly Thr Cys

```


	100		105		110
Gln	Val	Ile	Val	Thr	Thr
			Pro	Met	Glu
				Met	Leu
					Lys
					Ile
	115		120		125

<210> 2733

<211> 3619

<212> DNA

<213> Homo sapiens

<400> 2733

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120
ccccagcacc catgtcacc ccaacagctg gactgcccgc tggccatgga gcggatcaag
180
gaggaccggc ccatcaccat caaggacgac aagggaacc tcaaccgctg catcgagac
240
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300
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360
gcggagacac ggggaagcacg cgaggctgcc cggagtccgg ataagccggg cgggagcccc
420
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540
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600
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660
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720
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780
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840
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960
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1020
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1200
agcagagtct gccggcaca gaaggacact ttccttggcc ccgtcctcaa gcaaattgac
1260
atcacgtatg tgaggaaactg caagttcacc tcgcctggtg cctccctt catcagtttc
1320

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atgcagtgga ccttgacgga gctgctggcc ctggagccgg gtgtggccta ccagcacgcc
1380
ttcctctaca tccgccagct cgccatacac ctgcgcaacg ccatgaccac ccgcaagaag
1440
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1980
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2040
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2100
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2160
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2220
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2280
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2340
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2520
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2580
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<211> 790

<212> PRT

<213> Homo sapiens

<400> 2734

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Pro	Gly	Gly	Ser	Pro	Ser	Ala	Ser	Arg	Arg	Lys	Gly	Arg	Ala	Ser	Glu
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His	Lys	Asp	Gln	Leu	Ser	Arg	Leu	Lys	Asp	Arg	Asp	Pro	Glu	Phe	Tyr
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Lys	Phe	Leu	Gln	Glu	Asn	Asp	Gln	Ser	Leu	Leu	Asn	Phe	Ser	Asp	Ser
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 Gly Thr Trp Leu Glu Asp Leu Asn Phe Pro Glu Ile Lys Arg Arg Lys
 675 680 685
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 690 695 700
 Asp Leu Asn Ser Ser Glu Glu Asp Asp Thr Glu Gly Phe Leu Glu Arg
 705 710 715 720
 Gly Ile Leu Gly Pro Leu Ser Thr Arg His Gly Val Glu Asp Asp Glu
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 Glu Asp Glu Glu Glu Gly Glu Glu Asp Ser Ser Asn Ser Glu Gly Glu
 740 745 750
 Trp Ser Trp Asp Gly Asp Pro Asp Ala Glu Ala Gly Leu Ala Pro Gly
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<210> 2735

<211> 1666

<212> DNA

<213> Homo sapiens

<400> 2735

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<210> 2736

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2736

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		20					25						30		
Phe	His	Ser	Ser	His	Ile	Ser	Thr	Ile	Gly	Val	Asp	Phe	Lys	Met	Lys
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	50					55				60					
Ala	Gly	Gln	Glu	Arg	Tyr	Gln	Thr	Ile	Thr	Lys	Gln	Tyr	Tyr	Arg	Arg
65				70					75					80	
Ala	Gln	Gly	Ile	Phe	Leu	Val	Tyr	Asp	Ile	Ser	Ser	Glu	Arg	Ser	Tyr
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Gln	His	Ile	Met	Lys	Trp	Val	Ser	Asp	Val	Asp	Glu	Tyr	Ala	Pro	Glu
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Arg	Gln	Val	Gly	Arg	Glu	Gln	Gly	Gln	Gln	Lys	Cys	Pro	Ser	Leu	Gln			
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Leu	Ala	Lys	Glu	Tyr	Gly	Met	Asp	Phe	Tyr	Glu	Thr	Ser	Ala	Cys	Thr			
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Asn	Leu	Asn	Ile	Lys	Glu	Ser	Phe	Thr	Arg	Leu	Thr	Glu	Leu	Val	Leu			
				165					170					175				
Gln	Ala	His	Arg	Lys	Glu	Leu	Glu	Gly	Leu	Arg	Met	Arg	Ala	Ser	Asn			
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Glu	Leu	Ala	Leu	Ala	Glu	Leu	Glu	Glu	Glu	Glu	Gly	Lys	Pro	Glu	Gly			
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<210> 2737

<211> 898

<212> DNA

<213> Homo sapiens

<400> 2737

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<210> 2738

<211> 299

<212> PRT

<213> Homo sapiens

<400> 2738

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 35           40           45
Lys Tyr Val Ala Asp Val Leu Pro Gly Lys Asn Gln Arg Ala Val Ser
 50           55           60
Met Ala Ser Ala Ala Arg Glu Leu Val Ile Gln Arg Leu Ser Leu Val
 65           70           75           80
Arg Ser Leu Cys Glu Ser Glu Glu Gln Arg Leu Leu Glu Gln Val His
 85           90           95
Gly Glu Glu Glu Arg Ala His Gln Ser Ile Leu Thr Gln Arg Val His
100           105           110
Trp Ala Glu Ala Leu Gln Lys Leu Asp Thr Ile Arg Thr Gly Leu Val
115           120           125
Gly Met Leu Thr His Leu Asp Asp Leu Gln Leu Ile Gln Lys Glu Gln
130           135           140
Glu Ile Phe Glu Arg Thr Glu Glu Ala Glu Gly Ile Leu Asp Pro Gln
145           150           155           160
Glu Ser Glu Met Leu Asn Phe Asn Glu Lys Cys Thr Arg Ser Pro Leu
165           170           175
Leu Thr Gln Leu Trp Ala Thr Ala Val Leu Gly Ser Leu Ser Gly Thr
180           185           190
Glu Asp Ile Arg Ile Asp Glu Arg Thr Val Ser Pro Phe Leu Gln Leu
195           200           205
Ser Asp Asp Arg Lys Thr Leu Thr Ser Ala Pro Arg Ser Gln Arg Cys
210           215           220
Ala Asp Gly Pro Glu Arg Phe Asp His Trp Pro Asn Ala Leu Ala Ala
225           230           235           240
Thr Ser Phe Gln Asn Gly Leu His Ala Trp Met Val Asn Val Gln Asn
245           250           255
Ser Cys Ala Tyr Lys Val Gly Val Ala Ser Gly His Leu Pro Arg Lys
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<210> 2739

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2739

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180

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<210> 2740

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2740

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Ile Ile Ser Gly Val Val Ser Leu Phe Ile Phe Gly Phe Cys Trp Leu			
	35	40	45
Ser Pro Ala Leu Gln Asp Leu Gln Ala Thr Glu Ala Asn Cys Thr Val			
	50	55	60
Leu Ser Val Gln Gln Ile Gly Glu Val Phe Glu Cys Thr Phe Thr Cys			
65	70	75	80
Gly Ala Asp Cys Arg Gly Thr Ser Gln Tyr Pro Cys Val Gln Val Tyr			
	85	90	95
Val Asn Asn Ser Glu Ser Asn Ser Arg Ala Leu Leu His Ser Asp Glu			
	100	105	110
His Gln Leu Leu Thr Asn Pro Lys Cys Ser Tyr Ile Pro Pro Cys Lys			
	115	120	125
Arg Glu Asn Gln Lys Asn Leu Glu Ser Val Met Asn Trp Gln Gln Tyr			
	130	135	140
Trp Lys Asp Glu Ile Gly Ser Gln Pro Phe Thr Cys Tyr Phe Asn Gln			
145	150	155	160
His Gln Arg Pro Asp Asp Val Leu Leu His Arg Thr His Asp Glu Ile			
	165	170	175
Val Leu Leu His Cys Phe Leu Trp Pro Leu Val Thr Phe Val Val Gly			
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<210> 2741

<211> 1487

<212> DNA

<213> Homo sapiens

<400> 2741

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 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Met Tyr Phe Asn Cys Ser Glu Asp Asn Pro Ser Arg Glu Arg Cys Ser
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 Val Pro Tyr Ser Cys Cys Leu Pro Thr Pro Asp Gln Ala Val Ile Asn
 65 70 75 80
 Thr Met Cys Gly Gln Gly Met Gln Ala Phe Asp Tyr Leu Glu Ala Ser
 85 90 95
 Lys Val Ile Tyr Thr Asn Gly Cys Ile Asp Lys Leu Val Asn Trp Ile
 100 105 110
 His Ser Asn Leu Phe Leu Leu Gly Gly Val Ala Leu Gly Leu Ala Ile
 115 120 125
 Pro Gln Leu Val Gly Ile Leu Leu Ser Gln Ile Leu Val Asn Gln Ile

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 <212> DNA
 <213> Homo sapiens

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<210> 2745
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<211> 98

<212> PRT

<213> Homo sapiens

<400> 2746

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			20					25					30		
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		50				55					60				
Thr	Ala	Lys	Arg	Gly	Leu	Ser	His	Leu	Glu	Arg	Asn	Phe	Gln	Thr	Ser
65					70				75					80	
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<211> 1100

<212> DNA

<213> Homo sapiens

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<210> 2748

<211> 205

<212> PRT

<213> Homo sapiens

<400> 2748

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			20					25					30		
Trp	Thr	Gly	Ala	Phe	Trp	Ile	Pro	Arg	Pro	Pro	Ala	Gly	Ser	Pro	Lys
		35				40						45			
Gly	Cys	Phe	Ala	Cys	Val	Ser	Lys	Pro	Pro	Ala	Leu	Gln	Ala	Pro	Ala
	50					55					60				
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65					70					75				80	
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Gly	Ala	Pro	Pro	Ala	Cys	Lys	His	Leu	Ala	Glu	Lys	Lys	Thr	Met	Thr

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Asn	Pro	Thr	Thr	Val	Ile	Glu	Val	Tyr	Pro	Asp	Thr	Thr	Glu	Val	Asn
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Asp	Tyr	Tyr	Leu	Trp	Ser	Ile	Phe	Asn	Phe	Val	Tyr	Leu	Asn	Phe	Cys
	130					135					140				
Cys	Leu	Gly	Phe	Ile	Ala	Leu	Ala	Tyr	Ser	Leu	Lys	Val	Arg	Asp	Lys
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Lys	Leu	Leu	Asn	Asp	Leu	Asn	Gly	Ala	Val	Glu	Asp	Ala	Lys	Thr	Ala
			165					170					175		
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<212> DNA

<213> Homo sapiens

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1020

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<211> 332

<212> PRT

<213> Homo sapiens

<400> 2750

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Thr	Ala	Gly	Tyr	Asp	His	Thr	Val	Arg	Phe	Trp	Gln	Ala	His	Ser	Gly
			20					25					30		
Ile	Cys	Thr	Arg	Thr	Val	Gln	His	Gln	Asp	Ser	Gln	Val	Asn	Ala	Leu
		35				40						45			
Glu	Val	Thr	Pro	Asp	Arg	Ser	Met	Ile	Ala	Ala	Ala	Val	Gln	Pro	Val
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Ser	Leu	Gly	Tyr	Gln	His	Ile	Arg	Met	Tyr	Asp	Leu	Asn	Ser	Asn	Asn
65				70					75					80	
Pro	Asn	Pro	Ile	Ile	Ser	Tyr	Asp	Gly	Val	Asn	Lys	Asn	Ile	Ala	Ser

					85					90					95	
Val	Gly	Phe	His	Glu	Asp	Gly	Arg	Trp	Met	Tyr	Thr	Gly	Gly	Glu	Asp	
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Cys	Thr	Ala	Arg	Ile	Trp	Asp	Leu	Arg	Ser	Arg	Asn	Leu	Gln	Cys	Gln	
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Trp	Asp	Leu	Lys	Thr	Asp	His	Asn	Glu	Gln	Leu	Ile	Pro	Glu	Pro	Glu	
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Val	Ser	Ile	Thr	Ser	Ala	His	Ile	Asp	Pro	Asp	Ala	Ser	Tyr	Met	Ala	
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Ala	Val	Asn	Ser	Thr	Gly	Asn	Cys	Tyr	Val	Trp	Asn	Leu	Thr	Gly	Gly	
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His	Thr	Arg	Tyr	Ala	Leu	Gln	Cys	Arg	Phe	Ser	Pro	Asp	Ser	Thr	Leu	
225				230					235						240	
Leu	Ala	Thr	Cys	Ser	Ala	Asp	Gln	Thr	Cys	Lys	Ile	Trp	Arg	Thr	Ser	
			245						250					255		
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Glu	Ser	Ser	Arg	Gly	Trp	Met	Trp	Gly	Cys	Ala	Phe	Ser	Gly	Asp	Ser	
		275					280					285				
Gln	Tyr	Ile	Val	Thr	Ala	Ser	Ser	Asp	Asn	Leu	Ala	Arg	Leu	Trp	Cys	
	290					295					300					
Val	Glu	Thr	Gly	Glu	Ile	Lys	Arg	Glu	Tyr	Gly	Gly	His	Gln	Lys	Ala	
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<212> DNA
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 35 40 45
 Pro Pro Pro Thr Thr Arg Thr Val Ala Ser Ser Gly Thr His Thr Ser
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<210> 2753

<211> 2561

<212> DNA

<213> Homo sapiens

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<211> 731
 <212> PRT
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<400> 2754

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 35           40           45
Cys His Thr Val Val Pro Glu Lys Asp Gly Asp Asn Ile Ile Tyr Gln
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 225          230          235          240
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<210> 2755

<211> 4795

<212> DNA

<213> Homo sapiens

<400> 2755

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<212> PRT

<213> Homo sapiens

<400> 2756

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Ala Lys Glu Asn Leu Lys Lys Ile Gln Glu Met Glu Lys Ser Asp Glu
      50           55           60
Ser Ser Thr Asp Leu Glu Glu Leu Lys Asn Ala Asp Trp Ala Arg Phe
      65           70           75           80
Trp Val Gln Val Met Arg Asp Leu Arg Asn Gly Val Lys Leu Lys Lys
      85           90           95
Val Gln Glu Arg Gln Tyr Asn Pro Leu Pro Ile Glu Tyr Gln Leu Thr
      100           105           110
Pro Tyr Glu Met Leu Met Asp Asp Ile Arg Cys Lys Arg Tyr Thr Leu
      115           120           125
Arg Lys Val Met Val Asn Gly Asp Ile Pro Pro Arg Leu Lys Lys Ser
      130           135           140
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      145           150           155           160
Pro Val Ser Ala Arg Lys Leu Lys Pro Thr Pro Pro Arg Pro Arg Ser
      165           170           175
Leu His Glu Arg Ile Leu Glu Glu Ile Lys Ala Glu Arg Lys Leu Arg
      180           185           190
Pro Val Ser Pro Glu Glu Ile Arg Arg Ser Arg Leu Asp Val Thr Thr
      195           200           205
Pro Glu Ser Thr Lys Asn Leu Val Glu Ser Ser Met Val Asn Gly Gly
      210           215           220
Leu Thr Ser Gln Thr Lys Glu Asn Gly Leu Ser Thr Ser Gln Gln Val
      225           230           235           240
Pro Ala Gln Arg Lys Lys Leu Leu Arg Ala Pro Thr Leu Ala Glu Leu
      245           250           255
Asp Ser Ser Glu Ser Glu Glu Glu Thr Leu His Lys Ser Thr Ser Ser
      260           265           270
Ser Ser Val Ser Pro Ser Phe Pro Glu Glu Pro Val Leu Glu Ala Val
      275           280           285
Ser Thr Arg Lys Lys Pro Pro Lys Phe Leu Pro Ile Ser Ser Thr Pro
      290           295           300
Gln Pro Glu Arg Arg Gln Pro Pro Gln Arg Arg His Ser Ile Glu Lys
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Glu Thr Pro Thr Asn Val Arg Gln Phe Leu Pro Pro Ser Arg Gln Ser
      325           330           335
Ser Arg Ser Leu Glu Glu Phe Cys Tyr Pro Val Glu Cys Leu Ala Leu
      340           345           350
Thr Val Glu Glu Val Met His Ile Arg Gln Val Leu Val Lys Ala Glu
      355           360           365
Leu Glu Lys Tyr Gln Gln Tyr Lys Asp Ile Tyr Thr Ala Leu Lys Lys
      370           375           380
Gly Lys Leu Cys Phe Cys Cys Arg Thr Arg Arg Phe Ser Phe Phe Thr
      385           390           395           400
Trp Ser Tyr Thr Cys Gln Phe Cys Lys Arg Pro Val Cys Ser Gln Cys
      405           410           415
Cys Lys Lys Met Arg Leu Pro Ser Lys Pro Tyr Ser Thr Leu Pro Ile

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 465 470 475 480
 Gln Phe Pro Lys Glu Leu Met Glu Asp Trp Ser Thr Met Glu Val Cys
 485 490 495
 Val Asp Cys Lys Lys Phe Ile Ser Glu Ile Ile Ser Ser Ser Arg Arg
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 Ser Leu Val Leu Ala Asn Lys Arg Ala Arg Leu Lys Arg Lys Thr Gln
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 35 40 45
 Cys Gly Arg Tyr Ile Glu Glu His Ala Leu Lys His Phe Gln Glu Ser

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Lys Ser Glu Val Gln Leu Trp	Leu Lys Arg Ile Gln Val	Pro Ile
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His Thr Ala Ala Met Val Gln	Gln Tyr Gly Lys Arg Arg	Lys Gln Pro
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Glu Tyr Trp Phe Ala Val Pro	Arg Glu Arg Val Asp His	Leu Tyr Thr
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210	215	220
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225	230	235
Glu Glu Val Leu Pro Val Leu	Arg Pro Pro Arg Ala Phe	Trp Glu Asn
245	250	255
Lys Pro Leu Asn Arg Trp Ala	Arg Pro Phe Pro Ala Arg	Val Gln Gly
260	265	270
Tyr Pro Trp Arg Leu Ala Tyr	Ser Thr Leu Glu His Gly	Thr Ser Leu
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<211> 2210

<212> DNA

<213> Homo sapiens

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1440
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2040

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<210> 2764

<211> 423

<212> PRT

<213> Homo sapiens

<400> 2764

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Gly	Val	Ile	Asp	Pro	Gly	Met	Glu	Tyr	Val	Pro	Pro	Pro	Ala	Gly	Ser
		20						25					30		
Val	Ala	Ser	Gly	Pro	Val	Val	Gly	Gly	Arg	Lys	Lys	Val	Arg	Gly	Pro
		35					40					45			
Glu	Gln	Ile	Lys	Gln	Glu	Val	Glu	Ser	Glu	Glu	Glu	Lys	Pro	Asp	Arg
		50				55					60				
Met	Asp	Ile	Asp	Ser	Glu	Asp	Thr	Asp	Ser	Asn	Thr	Ser	Leu	Gln	Thr
65					70					75				80	
Arg	Ala	Arg	Glu	Lys	Arg	Lys	Pro	Gln	Leu	Glu	Lys	Asp	Thr	Lys	Pro
				85					90					95	
Lys	Glu	Pro	Arg	Tyr	Thr	Pro	Val	Ser	Ile	Tyr	Glu	Glu	Lys	Leu	Leu
				100				105						110	
Leu	Lys	Arg	Leu	Glu	Ala	Cys	Pro	Gly	Ala	Val	Ala	Met	Thr	Pro	Glu
		115					120					125			
Ala	Arg	Arg	Leu	Lys	Arg	Lys	Leu	Ile	Val	Arg	Gln	Ala	Lys	Arg	Asp
						135					140				
Arg	Gly	Leu	Pro	Leu	Phe	Asp	Leu	Asp	Gln	Val	Val	Asn	Ala	Ala	Leu
145					150					155					160
Leu	Leu	Val	Asp	Gly	Ile	Tyr	Gly	Ala	Lys	Glu	Gly	Gly	Ile	Ser	Arg
				165					170					175	
Leu	Pro	Ala	Gly	Gln	Ala	Thr	Tyr	Arg	Thr	Thr	Cys	Gln	Asp	Phe	Arg
				180				185					190		
Ile	Leu	Asp	Arg	Tyr	Gln	Thr	Ser	Leu	Pro	Ser	Arg	Lys	Gly	Phe	Arg
		195				200						205			
His	Gln	Thr	Thr	Lys	Phe	Leu	Tyr	Arg	Leu	Val	Gly	Ser	Glu	Asp	Met
		210				215						220			
Ala	Val	Asp	Gln	Ser	Ile	Val	Ser	Pro	Tyr	Thr	Ser	Arg	Ile	Leu	Lys
225					230					235					240
Pro	Tyr	Ile	Arg	Arg	Asp	Tyr	Glu	Thr	Lys	Pro	Pro	Lys	Leu	Gln	Leu
				245					250					255	
Leu	Ser	Gln	Ile	Arg	Ser	His	Leu	His	Arg	Ser	Asp	Pro	His	Trp	Thr
				260			265						270		
Pro	Glu	Pro	Asp	Ala	Pro	Leu	Asp	Tyr	Cys	Tyr	Val	Arg	Pro	Asn	His
		275					280					285			
Ile	Pro	Thr	Ile	Asn	Ser	Met	Cys	Gln	Glu	Phe	Phe	Trp	Pro	Gly	Ile
		290				295					300				
Asp	Leu	Ser	Glu	Cys	Leu	Gln	Tyr	Pro	Asp	Phe	Ser	Val	Val	Val	Leu
305					310					315					320
Tyr	Lys	Lys	Val	Ile	Ile	Ala	Phe	Gly	Phe	Met	Val	Pro	Asp	Val	Lys


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          325          330          335
Tyr Asn Glu Ala Tyr Ile Ser Phe Leu Phe Val His Pro Glu Trp Arg
          340          345          350
Arg Ala Gly Ile Ala Thr Phe Met Ile Tyr His Leu Ile Gln Thr Cys
          355          360          365
Met Gly Lys Asp Val Thr Leu His Val Ser Ala Ser Asn Pro Ala Met
          370          375          380
Leu Leu Tyr Gln Lys Phe Gly Phe Lys Thr Glu Glu Tyr Val Leu Asp
          385          390          395          400
Phe Tyr Asp Lys Tyr Tyr Pro Leu Glu Ser Thr Glu Cys Lys His Ala
          405          410          415
Phe Phe Leu Arg Leu Arg Arg
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<210> 2765

<211> 582

<212> DNA

<213> Homo sapiens

<400> 2765

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120
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180
tggctgcaag cctaaaccgg gcttggggccc atcctgagca gcccaggggt tgttcagctc
240
ccggcttctg gccactcggc atcgccagag tctccaggcc agcacagggc cagcgatggc
300
aagtccaaga agcaggcacc cgctgaccac cactgccccg atagttgcag aggccaggcc
360
aggggcgag ctgacctcca ggaaggcaga gaggttgtgc tgggagctgg ttgtgtccca
420
gcagagcaga ggcttctggc cagagcagtt gtctcgccgg atgtcgtgcc aggactccag
480
ggcacagttg cagtcggcct gcaggtaag gtcacagcgg gcggccagcg ccccatccac
540
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582

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<210> 2766

<211> 100

<212> PRT

<213> Homo sapiens

<400> 2766

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Met Gly Arg Trp Pro Pro Ala Val Thr Leu Thr Cys Arg Pro Thr Ala
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Thr Val Pro Trp Ser Pro Gly Thr Thr Ser Ala Glu Thr Thr Ala Leu
  20           25           30
Ala Arg Ser Leu Cys Ser Ala Gly Thr Gln Pro Ala Pro Ser Thr Thr
  35           40           45
Ser Leu Pro Ser Trp Arg Ser Ala Ala Pro Leu Ala Trp Pro Leu Gln

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50 55 60
 Leu Ser Gly Gln Trp Trp Ser Ala Gly Ala Cys Phe Leu Asp Leu Pro
 65 70 75 80
 Ser Leu Ala Leu Cys Trp Pro Gly Asp Ser Gly Asp Ala Glu Trp Pro
 85 90 95
 Glu Ala Gly Ser
 100

<210> 2767
 <211> 1202
 <212> DNA
 <213> Homo sapiens

<400> 2767
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 120
 gactcagcct acgacagcaa cgaccctgat gtggaatcca acagcagcag tggcatcagc
 180
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 240
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 300
 agctccctcg cacagcccga taggagatac tcagagccca gcatgccatc ctcccaggag
 360
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 420
 ccccggttag gctctcgttt ggaaagttag gaggctgaag acccatttcc agaggagggtc
 480
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 540
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 gcgtcctctg acagctcgcc cgtggcttct cttccagtc ccaaagaaa tttcttcagc
 660
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 720
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 780
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 840
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 900
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 960
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 1020
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 1080
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1202

<210> 2768
<211> 282
<212> PRT
<213> Homo sapiens

<400> 2768

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      20           25           30
Ser Leu Ala Gln Pro Asp Arg Arg Tyr Ser Glu Pro Ser Met Pro Ser
      35           40           45
Ser Gln Glu Cys Leu Glu Ser Arg Val Thr Asn Gln Thr Leu Thr Lys
      50           55           60
Ser Glu Gly Asp Phe Pro Val Pro Arg Val Gly Ser Arg Leu Glu Ser
65           70           75           80
Glu Glu Ala Glu Asp Pro Phe Pro Glu Glu Val Phe Pro Ala Val Gln
      85           90           95
Gly Lys Thr Lys Arg Pro Val Asp Leu Lys Ile Lys Asn Leu Ala Pro
      100          105          110
Gly Ser Val Leu Pro Arg Ala Leu Val Leu Lys Ala Phe Ser Ser Ser
      115          120          125
Ser Leu Asp Ala Ser Ser Asp Ser Ser Pro Val Ala Ser Pro Ser Ser
      130          135          140
Pro Lys Arg Asn Phe Phe Ser Arg His Gln Ser Phe Thr Thr Lys Thr
145          150          155          160
Glu Lys Gly Lys Pro Ser Arg Glu Ile Lys Lys His Ser Met Ser Phe
      165          170          175
Thr Phe Ala Pro His Lys Lys Val Leu Thr Lys Asn Leu Ser Ala Gly
      180          185          190
Ser Gly Lys Ser Gln Asp Phe Thr Arg Asp His Val Pro Arg Gly Val
      195          200          205
Arg Lys Glu Ser Gln Leu Ala Gly Arg Ile Val Gln Glu Asn Gly Cys
      210          215          220
Glu Thr His Asn Gln Thr Ala Arg Gly Phe Cys Leu Arg Pro His Ala
225          230          235          240
Leu Ser Val Asp Asp Val Phe Gln Gly Ala Asp Trp Glu Arg Pro Gly
      245          250          255
Ser Pro Pro Ser Tyr Glu Glu Ala Met Gln Gly Pro Ala Ala Arg Leu
      260          265          270
Val Ala Ser Gln Gln Phe Gln Phe Leu Ala
      275          280

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<210> 2769
<211> 1286
<212> DNA
<213> Homo sapiens

<400> 2769

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 180
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 240
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 300
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 360
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 420
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 480
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 720
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 1080
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 1140
 cttccacgtc tccaaaagcg ccttccgtgc accctcgtct atccctgcgc ctgggggctg
 1200
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 1260
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 1286

<210> 2770

<211> 228

<212> PRT

<213> Homo sapiens

<400> 2770

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 20 25 30
 Asn Arg Ile Arg Val Arg Gln Asp Leu Ala Ser Leu Pro Ala Glu Leu

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      35          40          45
Ile Asn Gln Ile Gly Asn Arg Cys His Pro Lys Leu Tyr Asp Glu Gly
  50          55          60
Asp Pro Ser Glu Lys Leu Glu Leu Val Thr Gly Thr Asn Val Tyr Ile
  65          70          75          80
Thr Arg Ala Gln Leu Met Asn Cys His Val Ser Ala Gly Thr Arg His
      85          90          95
Lys Val Leu Leu Arg Arg Leu Leu Ala Ser Phe Phe Asp Arg Asn Thr
      100          105          110
Leu Ala Asn Ser Cys Gly Thr Gly Ile Arg Ser Ser Thr Asn Asp Pro
      115          120          125
Arg Arg Lys Pro Leu Asp Ser Arg Val Leu His Ala Val Lys Tyr Tyr
      130          135          140
Cys Gln Asn Phe Ala Pro Asn Phe Lys Glu Ser Glu Met Asn Ala Ile
      145          150          155          160
Ala Ala Asp Met Cys Thr Asn Ala Arg Arg Val Val Arg Lys Ser Trp
      165          170          175
Met Pro Lys Val Lys Val Leu Lys Ala Glu Asp Asp Ala Tyr Thr Thr
      180          185          190
Phe Ile Ser Glu Thr Gly Lys Ile Glu Pro Asp Met Met Gly Val Glu
      195          200          205
His Gly Phe Glu Thr Ala Ser His Glu Gly Glu Ala Gly Pro Ile Ala
      210          215          220
Glu Ala Leu Gln
225

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<210> 2771

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2771

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120
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180
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240
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420
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480
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540
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600
gttgtcaagt ttgggcccctg gaaggcggtc ctagacaaca gcgacctcat gcactgcctg
660

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gagatggaca ttaaggccca ggggtacaag gtattctcca agttctacct gacgtacccc
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 780
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 1560
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<210> 2772

<211> 258

<212> PRT

<213> Homo sapiens

<400> 2772

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Met	Thr	Ser	Gln	Thr	Pro	Leu	Pro	Gln	Ser	Pro	Arg	Pro	Arg	Arg	Pro
			20					25					30		
Thr	Met	Ser	Thr	Val	Val	Glu	Leu	Asn	Val	Gly	Gly	Glu	Phe	His	Thr
			35				40				45				
Thr	Thr	Leu	Gly	Thr	Leu	Arg	Lys	Phe	Pro	Gly	Ser	Lys	Leu	Ala	Glu
			50			55				60					
Met	Phe	Ser	Ser	Leu	Ala	Lys	Ala	Ser	Thr	Asp	Ala	Glu	Gly	Arg	Phe
65				70					75					80	
Phe	Ile	Asp	Arg	Pro	Ser	Thr	Tyr	Phe	Arg	Pro	Ile	Leu	Asp	Tyr	Leu
			85				90						95		
Arg	Thr	Gly	Gln	Val	Pro	Thr	Gln	His	Ile	Pro	Glu	Val	Tyr	Arg	Glu

	100		105		110										
Ala	Gln	Phe	Tyr	Glu	Ile	Lys	Pro	Leu	Val	Lys	Leu	Leu	Glu	Asp	Met
	115						120				125				
Pro	Gln	Ile	Phe	Gly	Glu	Gln	Val	Ser	Arg	Lys	Gln	Phe	Leu	Leu	Gln
	130					135					140				
Val	Pro	Gly	Tyr	Ser	Glu	Asn	Leu	Glu	Leu	Met	Val	Arg	Leu	Ala	Arg
145					150					155				160	
Ala	Glu	Ala	Ile	Thr	Ala	Arg	Lys	Ser	Ser	Val	Leu	Val	Cys	Leu	Val
				165					170				175		
Glu	Thr	Glu	Glu	Gln	Asp	Ala	Tyr	Tyr	Ser	Glu	Val	Leu	Cys	Phe	Leu
			180					185					190		
Gln	Asp	Lys	Lys	Met	Phe	Lys	Ser	Val	Val	Lys	Phe	Gly	Pro	Trp	Lys
	195						200				205				
Ala	Val	Leu	Asp	Asn	Ser	Asp	Leu	Met	His	Cys	Leu	Glu	Met	Asp	Ile
	210					215				220					
Lys	Ala	Gln	Gly	Tyr	Lys	Val	Phe	Ser	Lys	Phe	Tyr	Leu	Thr	Tyr	Pro
225					230					235				240	
Thr	Lys	Arg	Asn	Glu	Phe	His	Phe	Asn	Ile	Tyr	Ser	Phe	Thr	Phe	Thr
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Trp	Trp														

<210> 2773

<211> 593

<212> DNA

<213> Homo sapiens

<400> 2773

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120

gaggaggagg cgctggaccc tctgggcatt atgcgctcca agaagcccaa gaaacatccc
180

aaagtggccg tgaaagccaa gccctcgccc cggtcacca tctttgacga ggaggtggac
240

cctgatgagg ggctcttttg cccgggcagg aagctgtctc cacaggaccc ctggaggac
300

gtgtcatcca tggaccccct gaagctatct gatgatcctg acctcggcgg ggccatcccc
360

ctgggtgact cctcctgct gccggccgcc tgtgagagtg gagggccac acccagcctc
420

agccacaggg acgcctccaa ggaactgttc agacaaattc aaaaagagcc gtaacactgg
480

gattagcttc ttgagagcag gaaccacatt cattctttgt gtctgccctg tgactatcca
540

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593

<210> 2774

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2774

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 20 25 30
 Glu Asp Ala Glu Glu Ser Leu Glu Glu Glu Glu Ala Leu Asp Pro Leu
 35 40 45
 Gly Ile Met Arg Ser Lys Lys Pro Lys Lys His Pro Lys Val Ala Val
 50 55 60
 Lys Ala Lys Pro Ser Pro Arg Leu Thr Ile Phe Asp Glu Glu Val Asp
 65 70 75 80
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<210> 2778

<211> 1146

<212> PRT

<213> Homo sapiens

<400> 2778

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Leu Ile Leu Ser Asp Ser Val Met Asn Ile Phe Lys Asp Arg Asn Phe
      50           55           60
Asp Ser Cys Cys Ile Cys Ala Cys Asn Met Asn Ile Lys Gly Ala Asp
      65           70           75           80
Val Gly Leu Tyr Ile Pro Asp Ser Ser Asn Glu Asp Gln Tyr Arg Cys
      85           90           95
Thr Cys Gly Phe Ser Ala Ile Met Asn Arg Lys Leu Gly Tyr Asn Ser
      100          105          110
Gly Leu Phe Leu Glu Asp Glu Leu Asp Ile Phe Gly Lys Asn Ser Asp
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Ile Gly Gln Ala Ala Glu Arg Arg Leu Met Met Cys Gln Ser Thr Phe
      130          135          140
Leu Pro Gln Val Glu Gly Thr Lys Lys Pro Gln Glu Pro Pro Ile Ser
      145          150          155          160
Leu Leu Leu Leu Leu Gln Asn Gln His Thr Gln Pro Phe Ala Ser Leu
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Asn Phe Leu Asp Tyr Ile Ser Ser Asn Asn Arg Gln Thr Leu Pro Cys
      180          185          190
Val Ser Trp Ser Tyr Asp Arg Val Gln Ala Asp Asn Asn Asp Tyr Trp
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Pro Thr Gly Gly Lys Val Asp Glu Ala Leu Val Arg Ser Ala Thr Val
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His Ser Trp Pro His Ser Asn Val Leu Asp Ile Ser Met Leu Ser Ser
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Gln Asp Val Val Arg Met Leu Leu Ser Leu Gln Pro Phe Leu Gln Asp
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Ala Ile Gln Lys Lys Arg Thr Gly Arg Thr Trp Glu Asn Ile Gln His
      275          280          285
Val Gln Gly Pro Leu Thr Trp Gln Gln Phe His Lys Met Ala Gly Arg
      290          295          300
Gly Thr Tyr Gly Ser Glu Glu Ser Pro Glu Pro Leu Pro Ile Pro Thr
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Leu Leu Val Gly Tyr Asp Lys Asp Phe Leu Thr Ile Ser Pro Phe Ser
      325          330          335
Leu Pro Phe Trp Glu Arg Leu Leu Leu Asp Pro Tyr Gly Gly His Arg
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Asp Val Ala Tyr Ile Val Val Cys Pro Glu Asn Glu Ala Leu Leu Glu
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Tyr Leu Ala Thr Leu Gln Leu Asp Ser Ser Leu Leu Ile Pro Pro Lys
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Gly Ser Val Gly Gly Gln Asn Pro Ser Thr Gly Gly Ile Ser Ala Asp
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Lys Asp Glu Gln Val Phe Tyr Ile Gln Tyr Leu Lys Ser Met Ala Phe
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Ser Val Tyr Cys Gln Cys Arg Arg Pro Leu Pro Thr Gln Ile His Ile
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Lys Ser Leu Thr Gly Phe Gly Pro Ala Ala Ser Ile Glu Met Thr Leu
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Lys Asn Pro Glu Arg Pro Ser Pro Ile Gln Leu Tyr Ser Pro Pro Phe
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      850              855              860
Lys Asp Val Cys Arg Met Cys Gly Ile Ser Ala Ala Asp Ser Pro Ser
      865              870              875              880
Ile Leu Ser Ala Cys Leu Val Ala Met Glu Pro Gln Gly Ser Phe Val
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Val Met Pro Asp Ala Val Thr Met Gly Ser Val Phe Gly Arg Ser Thr
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Ala Leu Asn Met Gln Ser Ser Gln Leu Asn Thr Pro Gln Asp Ala Ser
      915              920              925
Cys Thr His Ile Leu Val Phe Pro Thr Ser Ser Thr Ile Gln Val Ala
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Pro Ala Asn Tyr Pro Asn Glu Asp Gly Phe Ser Pro Asn Asn Asp Asp
      945              950              955              960
Met Phe Val Asp Leu Pro Phe Pro Asp Asp Met Asp Asn Asp Ile Gly
      965              970              975
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      980              985              990
Pro Ser Pro Gly Ser Pro Ser Gly Ile Gly Val Gly Ser His Phe Gln
      995              1000              1005
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      1010              1015              1020
Glu Leu Lys Gln Gln Pro Leu Ala Leu Gly Tyr Phe Val Ser Thr Ala
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Lys Ala Glu Asn Leu Pro Gln Trp Phe Trp Ser Ser Cys Pro Gln Ala
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Gln Asn Gln Cys Pro Leu Phe Leu Lys Ala Ser Leu His His His Ile
      1060              1065              1070
Ser Val Ala Gln Thr Asp Glu Leu Leu Pro Ala Arg Asn Ser Gln Arg
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Val Pro His Pro Leu Asp Ser Lys Thr Thr Ser Asp Val Leu Arg Phe
      1090              1095              1100
Val Leu Glu Gln Tyr Asn Ala Leu Ser Trp Leu Thr Cys Asn Pro Ala
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Thr Gln Asp Arg Thr Ser Cys Leu Pro Val His Phe Val Val Leu Thr
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<210> 2779

<211> 2461

<212> DNA

<213> Homo sapiens

<400> 2779

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180

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<211> 720

<212> PRT

<213> Homo sapiens

<400> 2780

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Val	Thr	Gly	Ile	Arg	Arg	Met	Arg	Phe	Lys	Gly	Leu	Ala	Gly	Val	Asp
			35				40					45			
Ser	Ser	Leu	Glu	Val	Val	Ser	Leu	Leu	Pro	Pro	Arg	Ser	Phe	Ser	Leu
			50				55				60				
Asn	Ser	Glu	Gly	Ala	Glu	Arg	Met	Ala	Thr	Thr	Gly	Thr	Pro	Thr	Ala
					70					75				80	
Asp	Arg	Gly	Asp	Ala	Ala	Ala	Thr	Asp	Asp	Pro	Ala	Ala	Arg	Phe	Gln
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Val	Gln	Lys	His	Ser	Trp	Asp	Gly	Leu	Arg	Ser	Ile	Ile	His	Gly	Ser
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Phe	Val	Gln	Lys	Thr	Asp	Glu	Ser	Gly	Pro	His	Ser	His	Arg	Leu	Tyr
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Tyr	Leu	Gly	Met	Pro	Tyr	Gly	Ser	Arg	Glu	Asn	Ser	Leu	Leu	Tyr	Ser
					150				155					160	
Glu	Ile	Pro	Lys	Lys	Val	Arg	Lys	Glu	Ala	Leu	Leu	Leu	Leu	Ser	Trp
					165				170					175	
Lys	Gln	Met	Leu	Asp	His	Phe	Gln	Ala	Thr	Pro	His	His	Gly	Val	Tyr

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		210					215				220					
Gln	Ala	Ser	Asn	Ser	Leu	Phe	His	Cys	Arg	Asp	Gly	Gly	Lys	Asn	Gly	
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Phe	Met	Val	Ser	Pro	Gly	Pro	Gly	Cys	Val	Ser	Pro	Met	Lys	Pro	Leu	
				245					250					255		
Glu	Ile	Lys	Thr	Gln	Cys	Ser	Gly	Pro	Arg	Met	Asp	Pro	Lys	Ile	Cys	
			260					265				270				
Pro	Ala	Asp	Pro	Ala	Phe	Phe	Ser	Phe	Ile	Asn	Asn	Ser	Asp	Leu	Trp	
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Val	Ala	Asn	Ile	Glu	Thr	Gly	Glu	Glu	Arg	Arg	Leu	Thr	Phe	Cys	His	
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Gln	Gly	Leu	Ser	Asn	Val	Leu	Asp	Asp	Pro	Lys	Ser	Ala	Gly	Val	Ala	
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Thr	Phe	Val	Ile	Gln	Glu	Glu	Phe	Asp	Arg	Phe	Thr	Gly	Tyr	Trp	Trp	
				325					330					335		
Cys	Pro	Thr	Ala	Ser	Trp	Glu	Gly	Ser	Glu	Gly	Leu	Lys	Thr	Leu	Arg	
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Ile	Leu	Tyr	Glu	Glu	Val	Asp	Glu	Ser	Glu	Val	Glu	Val	Ile	His	Val	
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Pro	Ser	Pro	Ala	Leu	Glu	Glu	Arg	Lys	Thr	Asp	Ser	Tyr	Arg	Tyr	Pro	
		370				375					380					
Arg	Thr	Gly	Ser	Lys	Asn	Pro	Lys	Ile	Ala	Leu	Lys	Leu	Ala	Glu	Phe	
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Gln	Thr	Asp	Ser	Gln	Gly	Lys	Ile	Val	Ser	Thr	Gln	Glu	Lys	Glu	Leu	
				405					410					415		
Val	Gln	Pro	Phe	Ser	Ser	Leu	Phe	Pro	Lys	Val	Glu	Tyr	Ile	Ala	Arg	
			420					425					430			
Ala	Gly	Trp	Thr	Arg	Asp	Gly	Lys	Tyr	Ala	Trp	Ala	Met	Phe	Leu	Asp	
		435				440					445					
Arg	Pro	Gln	Gln	Trp	Leu	Gln	Leu	Val	Leu	Leu	Pro	Pro	Ala	Leu	Phe	
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Ile	Pro	Ser	Thr	Glu	Asn	Glu	Glu	Gln	Arg	Leu	Ala	Ser	Ala	Arg	Ala	
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Val	Pro	Arg	Asn	Val	Gln	Pro	Tyr	Val	Val	Tyr	Glu	Glu	Val	Thr	Asn	
			485						490					495		
Val	Trp	Ile	Asn	Val	His	Asp	Ile	Phe	Tyr	Pro	Phe	Pro	Gln	Ser	Glu	
			500					505					510			
Gly	Glu	Asp	Glu	Leu	Cys	Phe	Leu	Arg	Ala	Asn	Glu	Cys	Lys	Thr	Gly	
		515					520				525					

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Tyr Ser Ser Val Ser Thr Pro Pro Cys Val His Val Tyr Lys Leu Ser		640
	645	650
Gly Pro Asp Asp Pro Leu His Lys Gln Pro Arg Phe Trp Ala Ser		655
	660	665
Met Met Glu Ala Ala Ser Cys Pro Pro Asp Tyr Val Pro Pro Glu Ile		670
	675	680
Phe His Phe His Thr Arg Ser Asp Val Arg Leu Tyr Gly Met Ile Tyr		685
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Lys Pro His Ala Leu Gln His Ile Thr Lys Lys Ser Thr Val Phe Glu		700
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<211> 1268

<212> DNA

<213> Homo sapiens

<400> 2781

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<211> 314

<212> PRT

<213> Homo sapiens

<400> 2782

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			20					25					30		
Ala	Arg	Thr	Gly	Leu	Arg	Ile	Cys	Asp	Leu	Leu	Ser	Asp	Phe	Asp	Glu
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Pro	Thr	Leu	Glu	Ile	Asp	Ile	Glu	Gly	Gln	Leu	Lys	Arg	Leu	Lys	Gly
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Phe	Ala	Glu	Arg	Ile	Arg	Pro	Met	Val	Arg	Asp	Gly	Val	Tyr	Phe	Met
				85					90					95	
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Ser	Ser	Asn	Cys	Thr	Val	Gly	Gly	Val	Cys	Thr	Gly	Leu	Gly	Ile	Pro
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 1500
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 1560
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 1620
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 1740
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 1800
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 taacttgttt tttgtacat aatgtacata ctgtcaattt tttattaaaa gaaatatgct
 1920
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 1980
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 2040
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 2100
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 2160
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 2220
 aacaggattt tgcttaaaat acttgttact tgtcccaaat caaaatatct caaaatctta
 2280
 gaatacttaa gtcttttagt acgtgttttt ttcccttggt caaataatct gaaaatattt
 2340
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 2376

<210> 2784

<211> 361

<212> PRT

<213> Homo sapiens

<400> 2784

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Glu	Val	Leu	Gly	Ile	Lys	Arg	Asp	Lys	Ser	Asp	Ser	Pro	Ala	Ile	Gln
		20						25					30		
Leu	Arg	Leu	Lys	Glu	Pro	Met	Asp	Val	Asp	Val	Glu	Asp	Tyr	Tyr	Pro
		35					40					45			
Ala	Phe	Leu	Asp	Met	Val	Arg	Ser	Leu	Leu	Asp	Gly	Asn	Ile	Asp	Ser
	50					55				60					
Ser	Gln	Tyr	Glu	Asp	Ser	Leu	Arg	Glu	Met	Phe	Thr	Ile	His	Ala	Tyr
65					70				75					80	
Ile	Ala	Phe	Thr	Met	Asp	Lys	Leu	Ile	Gln	Ser	Ile	Val	Arg	Gln	Leu

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<210> 2785
<211> 492
<212> DNA
<213> Homo sapiens
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<400> 2785
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120
tgatgagatc ctctctcaca tcttgagtca cgtccccagc acagatctga ttctgaacgt
180
cggcgctacc tgtcggaagc ttgcagccct gtgccttgac aagagcctca tccacaccgt
240
gttgctgcaa aaggactatc aggcgagcga ggacaaagtg aggcagctgg tgaaggagat
300
cggccgggag atccagcagc tgagcatggc tggctgctac tggctgcttg gctccaccgt
360

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ggaacacgtg gcccgtgcc cgcagcctgg tgaaggtgaa cctctcgggc tgccacctca
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 492

<210> 2786
 <211> 155
 <212> PRT
 <213> Homo sapiens

<400> 2786
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 20 25 30
 Asp Glu Ile Leu Leu His Ile Leu Ser His Val Pro Ser Thr Asp Leu
 35 40 45
 Ile Leu Asn Val Arg Arg Thr Cys Arg Lys Leu Ala Ala Leu Cys Leu
 50 55 60
 Asp Lys Ser Leu Ile His Thr Val Leu Leu Gln Lys Asp Tyr Gln Ala
 65 70 75 80
 Ser Glu Asp Lys Val Arg Gln Leu Val Lys Glu Ile Gly Arg Glu Ile
 85 90 95
 Gln Gln Leu Ser Met Ala Gly Cys Tyr Trp Leu Pro Gly Ser Thr Val
 100 105 110
 Glu His Val Ala Arg Cys Pro Gln Pro Gly Glu Gly Glu Pro Leu Gly
 115 120 125
 Leu Pro Pro His Phe Pro Ala Pro Leu Gln Asp Ala Leu Gly Pro Ala
 130 135 140
 Ala Pro Ala Leu Ala Gly His Arg Arg Glu Pro
 145 150 155

<210> 2787
 <211> 299
 <212> DNA
 <213> Homo sapiens

<400> 2787
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 atgtggggag aagagccgta ctctgacata tcagttgcta aaacacgtgc agggcatgcc
 120
 acaatgcaca gacatggcag tatccttctg gtgggagggg gtcaccattt gctctgccct
 180
 gccctctgct ggggtctctt acaggtgcta ctgcatccag cgcttgaaac aattctgtgg
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 299

<210> 2788
 <211> 95
 <212> PRT

<213> Homo sapiens

<400> 2788

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Met Thr Arg Asp Ser Gly Met Lys Gln Lys His Ala Ala Ser Thr Ser
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Met Trp Gly Glu Glu Pro Tyr Ser Asp Ile Ser Val Ala Lys Thr Arg
          20           25           30
Ala Gly His Ala Thr Met His Arg His Gly Ser Ile Leu Leu Val Gly
          35           40           45
Gly Ser His His Leu Leu Cys Pro Ala Leu Cys Trp Val Leu Leu Gln
          50           55           60
Val Leu Leu His Pro Ala Leu Glu Thr Ile Leu Trp Gly Ile Asp Ser
          65           70           75           80
Glu Glu Ile Thr Asp Gly Arg Asp Phe Leu Pro Gln Leu Thr Gln
          85           90           95

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<210> 2789

<211> 492

<212> DNA

<213> Homo sapiens

<400> 2789

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120
gcgaggccag gctgtgcagt ggggccagca ccagctgcag cttctcctcc agcaggtcca
180
ccctggactg cagcctctgc acttcttctc tcattgcact gtccactcct gcgggcagag
240
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300
cccagggaga ggcagagcca gaagactcag gccagggcct ctgccacccc cgctgctgc
360
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420
cgcagaggct cagggtcccc gccacgtga gggaggtcaa ggctgaggtc tcagcgcccc
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tcgttccgaa tt
492

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<210> 2790

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2790

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Arg Lys Ser Ala Arg Ser Gly Ser Arg Cys Gly Arg Ala Ala Gly Arg
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Ser Ala Pro Gly Gly Cys Arg Gly Pro Gly Ala His Ala Pro Val Pro
          20           25           30
Ala Arg Pro Gly Cys Ala Val Gly Pro Ala Pro Ala Ala Ala Ser Pro
          35           40           45
Pro Ala Gly Pro Pro Trp Thr Ala Ala Ser Ala Leu Leu Pro Ser Leu

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50		55		60
His Cys Pro Leu Leu Arg	Ala Glu Pro Gly Ala Gly Ser Arg Pro Ala			
65	70	75	80	
Gly Ser Pro Pro Thr Pro Pro Gly Leu Pro Pro Val Pro Arg Glu Arg				
	85	90	95	
Gln Ser Gln Lys Thr Gln Ala Gln Ala Ser Ala Thr Pro Ala Ala Cys				
	100	105	110	
Leu Ala Leu Ala Arg Gly Leu Arg Leu Cys Arg Leu Ser Thr Ser Gly				
	115	120	125	
Arg Val Ala Leu Arg Arg Gly Ser Gly Ser Arg Pro Arg				
130	135	140		

<210> 2791
 <211> 1271
 <212> DNA
 <213> Homo sapiens

<400> 2791
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 120
 ccaaattccc atttttcttc caatcacatt taaaatttca atatgttgca ggcagtatgt
 180
 gtaagattat atccaaatat ttactcctgg ttgctcctct tgggcaagct gtgaatatga
 240
 tcaaaatatt taaagaagga agaaggtaaa gatctaaaat atgacatgaa aatacccaga
 300
 gaagtgtgcc taaattagca ttagggtttg agggatccta aggatgacaa aaagggactc
 360
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 480
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 540
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 600
 accataccag atgtagagga ctcaagtcag agaccagatc agggacccca gagacctcct
 660
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 720
 cagagaccac caaaaccagg aggccatcac cgccatcctc cccacctcc ttttcaaat
 780
 cagcaacgac caccocaacg aggacaccgt caactctctc taccctgatt tccttctgtc
 840
 agcctgcagg aagcatcatc attcttccgg agggacagac cagcaagaca tccccaggag
 900
 caaccactct ggtaatctag aattcagtgg cagaaaataa ataagaagat aacttccttc
 960
 agaaagccat gacattgaaa taatgtggtc ataactcttt cttcagtata ccaataaaat
 1020
 attaatagca tgcggaagaa agaattgggtt gcatccacat ggagagtgtg ccatttagag
 1080

gtaacaggga gaggagaggg tgtgccatca agaggcaaca tggaggtgtt tcaaacctat
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 gcatcttggt ataaatatat ctttgctcac atgaatttta cttgttaatt agcctggctg
 1200
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 1271

<210> 2792

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2792

Cys	Ser	Leu	His	Pro	Val	Leu	Leu	Phe	Leu	Asp	Val	Asn	Tyr	Glu	Asp
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Phe	Thr	Phe	Thr	Ile	Pro	Asp	Val	Glu	Asp	Ser	Ser	Gln	Arg	Pro	Asp
			20					25					30		
Gln	Gly	Pro	Gln	Arg	Pro	Pro	Pro	Glu	Gly	Leu	Leu	Pro	Arg	Pro	Pro
		35					40					45			
Gly	Asp	Ser	Gly	Asn	Gln	Asp	Asp	Gly	Pro	Gln	Gln	Arg	Pro	Pro	Lys
	50				55					60					
Pro	Gly	Gly	His	His	Arg	His	Pro	Pro	Pro	Pro	Pro	Phe	Gln	Asn	Gln
65					70					75				80	
Gln	Arg	Pro	Pro	Gln	Arg	Gly	His	Arg	Gln	Leu	Ser	Leu	Pro	Arg	Phe
			85					90						95	
Pro	Ser	Val	Ser	Leu	Gln	Glu	Ala	Ser	Ser	Phe	Phe	Arg	Arg	Asp	Arg
			100					105					110		
Pro	Ala	Arg	His	Pro	Gln	Glu	Gln	Pro	Leu	Trp					
			115					120							

<210> 2793

<211> 847

<212> DNA

<213> Homo sapiens

<400> 2793

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 120
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 180
 cggccctgag agctgactct gcagctgagg tagagagaca acgatcagga accctaagaa
 240
 gaggcgccag aggagccgcc ttctgcctca gaacggcgtg actcggagaa ttggagcgtt
 300
 attcagtata ttaatgtctt attgataatg gcagaacatc caccactact ggatacaact
 360
 cagatcttaa gtagtgatat ttctcttttg tctgcccta ttgtaagtgc agatggaaca
 420
 caacagggtta ttctggtaca agttaacca ggagaagcat ttacaataag aagagaagat
 480

ggacagtttc agtgcattac aggtcctgct caggttccaa tgatgtcccc aaatggttct
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 gtgcctccta tctatgtgcc tcctggatat gcccacacagg ttattgaaga caatggtggt
 600
 cgaagagttg tcgtgggtccc tcaggcacca gagtttcacc ctggtagtca cacagttctc
 660
 caccgttctc cacatcctcc tctacctggt ttcattcctg tcccaactat gatgccgcct
 720
 caccacgtca tatgtactca cccgtgactg gagctggaga catgacaaca cagtatatgc
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 840
 cacgcgt
 847

<210> 2794

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2794

Met	Ala	Glu	His	Pro	Pro	Leu	Leu	Asp	Thr	Thr	Gln	Ile	Leu	Ser	Ser
1				5					10					15	
Asp	Ile	Ser	Leu	Leu	Ser	Ala	Pro	Ile	Val	Ser	Ala	Asp	Gly	Thr	Gln
			20					25					30		
Gln	Val	Ile	Leu	Val	Gln	Val	Asn	Pro	Gly	Glu	Ala	Phe	Thr	Ile	Arg
			35				40					45			
Arg	Glu	Asp	Gly	Gln	Phe	Gln	Cys	Ile	Thr	Gly	Pro	Ala	Gln	Val	Pro
			50			55					60				
Met	Met	Ser	Pro	Asn	Gly	Ser	Val	Pro	Pro	Ile	Tyr	Val	Pro	Pro	Gly
65					70					75				80	
Tyr	Ala	Pro	Gln	Val	Ile	Glu	Asp	Asn	Gly	Val	Arg	Arg	Val	Val	Val
				85					90					95	
Val	Pro	Gln	Ala	Pro	Glu	Phe	His	Pro	Gly	Ser	His	Thr	Val	Leu	His
			100					105					110		
Arg	Ser	Pro	His	Pro	Pro	Leu	Pro	Gly	Phe	Ile	Pro	Val	Pro	Thr	Met
			115				120					125			
Met	Pro	Pro	His	His	Val	Ile	Cys	Thr	His	Pro					
			130				135								

<210> 2795

<211> 1022

<212> DNA

<213> Homo sapiens

<400> 2795

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 120
 gcctggcagc tgctggttgt ggaatagttc tggatgccaa tctcctccag gctcctgcgg
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gtcattgagaa ggtgctgctc cttctcgtcg ggcttgctca gagagatgtg ccaggcccca
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 aatgaaggca aggccggcac ctctcgtgc tggccagaca aaccagctgc tctgtagtg
 720
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 780
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 900
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 1020
 gt
 1022

<210> 2796
 <211> 56
 <212> PRT
 <213> Homo sapiens

<400> 2796
 Ala Ser Ala Ala Cys Pro Ser Arg Ser Cys Trp Leu Arg Ser Ser Cys
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 Pro Lys Val Ala Glu Glu Gly Val Ser Ser Met Ser Pro Gly Ala Ser
 20 25 30
 Gly Glu Glu Ala Glu Val Leu Glu Pro Arg Gly Ser Ser Ser Gly Cys
 35 40 45
 Ser Ala Pro Leu Gly Ala Val Val
 50 55

<210> 2797
 <211> 475
 <212> DNA
 <213> Homo sapiens

<400> 2797
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 120

ctgaactcca tcagcgagtc cccgcatgag cgcatgcacc cctacatcga gctggcctgg
 180
 ggcttctcca ccgtgcttgg cactctactc ttcttgcccg aggtgggtgct gctctgctgg
 240
 atcaagttcc tccccgtgga tgcccgccgc cagcctggcc cccacactgg ccctggggagt
 300
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 360
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 475

<210> 2798

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2798

Arg	Pro	Leu	Leu	Ile	Ala	Phe	Ser	Ala	Cys	Thr	Thr	Val	Leu	Val	Ala
1				5					10					15	
Val	His	Leu	Phe	Ala	Leu	Leu	Ile	Ser	Thr	Cys	Ile	Leu	Pro	Asn	Val
		20						25					30		
Glu	Ala	Val	Ser	Asn	Ile	His	Asn	Leu	Asn	Ser	Ile	Ser	Glu	Ser	Pro
		35					40					45			
His	Glu	Arg	Met	His	Pro	Tyr	Ile	Glu	Leu	Ala	Trp	Gly	Phe	Ser	Thr
	50					55					60				
Val	Leu	Gly	Ile	Leu	Leu	Phe	Leu	Ala	Glu	Val	Val	Leu	Leu	Cys	Trp
65				70						75				80	
Ile	Lys	Phe	Leu	Pro	Val	Asp	Ala	Arg	Arg	Gln	Pro	Gly	Pro	Pro	Pro
			85						90				95		
Gly	Pro	Gly	Ser	His	Thr	Gly	Trp	Gln	Ala	Ala	Leu	Val	Ser	Thr	Ile
		100						105					110		
Ile	Met	Val	Pro	Val	Gly	Leu	Ile	Phe	Val	Val	Phe	Thr	Ile	His	Phe
		115					120					125			
Tyr	Arg	Ser	Leu	Val	Arg	His	Lys	Thr	Glu	Arg	His	Asn	Arg	Glu	Ile
	130					135					140				
Glu	Glu	Leu	His	Lys	Leu	Lys	Val	Gln	Leu	Asp	Gly	His	Glu		
145				150						155					

<210> 2799

<211> 2872

<212> DNA

<213> Homo sapiens

<400> 2799

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 240

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360
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420
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720
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780
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1560
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1740
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1860

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 2280
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 2700
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 2760
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<210> 2800

<211> 294

<212> PRT

<213> Homo sapiens

<400> 2800

Met	Ser	Pro	Phe	Leu	Phe	Cys	Cys	Met	Met	Val	Gly	Gly	Gly	Glu	Asp
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Thr	Phe	Met	Ala	Ser	Pro	Tyr	Lys	Pro	Glu	Ile	Ser	Arg	Glu	Gln	Ala
			20					25					30		
Ile	Ala	Leu	Leu	Lys	Asp	Gln	Glu	Pro	Gly	Ala	Phe	Ile	Ile	Arg	Asp
		35				40					45				
Ser	His	Ser	Phe	Arg	Gly	Ala	Tyr	Gly	Leu	Ala	Met	Lys	Val	Ser	Ser
	50				55			60							
Pro	Pro	Pro	Thr	Ile	Met	Gln	Gln	Asn	Lys	Lys	Gly	Asp	Met	Thr	His
65				70				75						80	
Glu	Leu	Val	Arg	His	Phe	Leu	Ile	Glu	Thr	Gly	Pro	Arg	Gly	Val	Lys
			85					90						95	
Leu	Lys	Gly	Cys	Pro	Asn	Glu	Pro	Asn	Phe	Gly	Ser	Leu	Ser	Ala	Leu

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      100      105      110
Val Tyr Gln His Ser Ile Ile Pro Leu Ala Leu Pro Cys Lys Leu Val
      115      120      125
Ile Pro Asn Arg Asp Pro Thr Asp Glu Ser Lys Asp Ser Ser Gly Pro
      130      135      140
Ala Asn Ser Thr Ala Asp Leu Leu Lys Gln Gly Ala Ala Cys Asn Val
      145      150      155      160
Leu Phe Ile Asn Ser Val Asp Met Glu Ser Leu Thr Gly Pro Gln Ala
      165      170      175
Ile Ser Lys Ala Thr Ser Glu Thr Leu Ala Ala Asp Pro Thr Pro Ala
      180      185      190
Ala Thr Ile Val His Phe Lys Val Ser Ala Gln Gly Ile Thr Leu Thr
      195      200      205
Asp Asn Gln Arg Lys Leu Phe Phe Arg Arg His Tyr Pro Leu Asn Thr
      210      215      220
Val Thr Phe Cys Asp Leu Asp Pro Gln Glu Arg Lys Trp Met Lys Thr
      225      230      235      240
Glu Gly Gly Ala Pro Ala Lys Leu Phe Gly Phe Val Ala Arg Lys Gln
      245      250      255
Gly Ser Thr Thr Asp Asn Ala Cys His Leu Phe Ala Glu Leu Asp Pro
      260      265      270
Asn Gln Pro Ala Ser Ala Ile Val Asn Phe Val Ser Lys Val Met Leu
      275      280      285
Asn Ala Gly Gln Lys Arg
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<210> 2801

<211> 549

<212> DNA

<213> Homo sapiens

<400> 2801

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180
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240
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420
cctcccacca ttgtacagga caaagtgtt gctctgatcc aggcattggg tgatgccttt
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549

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<210> 2802

<211> 151
 <212> PRT
 <213> Homo sapiens

<400> 2802
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 Leu Glu Lys Ala Thr Asp Gly Ser Leu Gln Ser Glu Asp Trp Thr Leu
 20 25 30
 Asn Met Glu Ile Cys Asp Ile Ile Asn Glu Thr Glu Glu Gly Pro Lys
 35 40 45
 Asp Ala Ile Arg Ala Leu Lys Lys Arg Leu Asn Gly Asn Arg Asn Tyr
 50 55 60
 Arg Glu Val Met Leu Ala Leu Thr Val Leu Glu Thr Cys Val Lys Asn
 65 70 75 80
 Cys Gly His Arg Phe His Ile Leu Val Ala Asn Arg Asp Phe Ile Asp
 85 90 95
 Ser Val Leu Val Lys Ile Ile Ser Pro Lys Asn Asn Pro Pro Thr Ile
 100 105 110
 Val Gln Asp Lys Val Leu Ala Leu Ile Gln Ala Trp Ala Asp Ala Phe
 115 120 125
 Arg Ser Ser Pro Asp Leu Thr Gly Val Val His Ile Tyr Glu Glu Leu
 130 135 140
 Lys Arg Lys Gly Val Glu Phe
 145 150

<210> 2803
 <211> 459
 <212> DNA
 <213> Homo sapiens

<400> 2803
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 ccgccagccg taggggtgtgt gctgtccggg ctacaggga cctgtctcc gagtcgttcg
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 300
 cgctgccctg caggatggcg gggtgacact tgccagtcag atgtggacna gtgcaatgaa
 360
 ggaagaagtg cagaggtgc agtccagggt ggacctgctg gaggagaagc tgcagctggt
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 459

<210> 2804
 <211> 153
 <212> PRT
 <213> Homo sapiens

<400> 2804

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 Gly Arg His Arg Trp Pro Pro Pro Gly Gly Ala Ala Pro Ala Pro
 20 25 30
 Val Arg Gly Met Thr Asp Ser Pro Pro Ala Val Gly Cys Val Leu
 35 40 45
 Ser Gly Leu Thr Gly Thr Leu Ser Pro Ser Arg Ser Cys Ser Val Cys
 50 55 60
 Thr Ser Pro Ser Ser Pro Pro Ala Thr Gly Thr Gly Pro Ala Ala Pro
 65 70 75 80
 Thr Ala Ile Cys Gln Pro Pro Cys Arg Asn Gly Gly Ser Cys Val Gln
 85 90 95
 Pro Gly Arg Cys Arg Cys Pro Ala Gly Trp Arg Gly Asp Thr Cys Gln
 100 105 110
 Ser Asp Val Asp Xaa Cys Asn Glu Gly Arg Ser Ala Glu Ala Ala Val
 115 120 125
 Gln Gly Gly Pro Ala Gly Gly Glu Ala Ala Ala Gly Thr Gly Pro Thr
 130 135 140
 Ala Gln Pro Gly Leu Ala Gly Thr Gly
 145 / 150

<210> 2805

<211> 771

<212> DNA

<213> Homo sapiens

<400> 2805

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 120
 gatctctgga atagctacca ggcaaagaaa aaaactatgg atgccaagaa tggccagaca
 180
 atgaatgaga agcaactctt ccatgggaca gatgccggct ccgtgccaca cgtcaatcga
 240
 aatggcttta accgcagcta tgccggaaag aatgctgtgg catatggaaa gggaacctat
 300
 ttgctgtca atgccaatta ttctgccaat gatacgtact ccagaccaga tgcaaatggg
 360
 agaaagcatg tgtattatgt gcgagtactt actggaatct atacacatgg aaatcattca
 420
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 480
 gataatgtgc accatccaag ttattttgtg gcattttatg actaccaagc ataccagag
 540
 taccttatta cgtttagaaa ataacacttt ggtatecttc ccacaaaatt atttccatt
 600
 tgtacatata tagttgtaaa acaagtttta gctttttttt ttaattcctc ttaacagatt
 660
 ttctaatat ccaaggatca ttctttgtcg ctgcagtcag atctttcttc agcttctctt
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 771

<210> 2806
 <211> 187
 <212> PRT
 <213> Homo sapiens

<400> 2806
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 Lys Ile Glu Arg Ile Gln Asn Pro Asp Leu Trp Asn Ser Tyr Gln Ala
 35 40 45
 Lys Lys Lys Thr Met Asp Ala Lys Asn Gly Gln Thr Met Asn Glu Lys
 50 55 60
 Gln Leu Phe His Gly Thr Asp Ala Gly Ser Val Pro His Val Asn Arg
 65 70 75 80
 Asn Gly Phe Asn Arg Ser Tyr Ala Gly Lys Asn Ala Val Ala Tyr Gly
 85 90 95
 Lys Gly Thr Tyr Phe Ala Val Asn Ala Asn Tyr Ser Ala Asn Asp Thr
 100 105 110
 Tyr Ser Arg Pro Asp Ala Asn Gly Arg Lys His Val Tyr Tyr Val Arg
 115 120 125
 Val Leu Thr Gly Ile Tyr Thr His Gly Asn His Ser Leu Ile Val Pro
 130 135 140
 Pro Ser Lys Asn Pro Gln Asn Pro Thr Asp Leu Tyr Asp Thr Val Thr
 145 150 155 160
 Asp Asn Val His His Pro Ser Leu Phe Val Ala Phe Tyr Asp Tyr Gln
 165 170 175
 Ala Tyr Pro Glu Tyr Leu Ile Thr Phe Arg Lys
 180 185

<210> 2807
 <211> 1660
 <212> DNA
 <213> Homo sapiens

<400> 2807
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 180
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 240
 aagaagggaa attatagtgg agtagcagtt tgtgaatctg gagtccttgg ttcaatcaca
 300
 gaacaagtag ggagaggagc caggacctag gccttcagggt ttccagcaag gaaggactct
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 480

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 540
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 600
 aagtgtccag aggaacatgg tcatgggctc gtcaaccctg gctgaagact caagttgggc
 660
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 780
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 900
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 960
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 1020
 aacgctgatg gtggtctcag ggggaaaact caggacctgc acataagtgg atgaccggaa
 1080
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 1140
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 1200
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 1560
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 1620
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 1660

<210> 2808

<211> 390

<212> PRT

<213> Homo sapiens

<400> 2808

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		20						25					30		
Leu	Glu	Leu	Glu	Ser	Ser	Gln	Asp	Ile	Gln	Asp	Val	Leu	Asp	Ala	Asn
		35					40				45				
Lys	Ser	Leu	Pro	Glu	Ser	Ser	Leu	Thr	Asp	Leu	Leu	Ser	Asp	Asn	Phe

50		55		60	
Thr Asp Ser Leu Val Ser Phe Ser Ala Glu Ile Leu Ser Arg Thr Leu					
65		70		75	80
Cys Glu Pro Leu Val Ala Ser Leu Trp Met Lys Leu Gly Asn Thr Gly					
	85		90		95
Ala Met Arg Arg Cys Val Lys Leu Thr Val Ala Leu Glu Thr Ala Glu					
	100		105		110
Cys Glu Phe Pro Pro His Leu Asp Val Tyr Ile Glu Asp Pro His Leu					
	115		120		125
Pro Pro Ser Leu Gly Leu Leu Pro Gly Ala Arg Val His Phe Ser Gln					
	130		135		140
Leu Glu Lys Arg Val Ser Arg Ser His Asn Val Tyr Cys Cys Phe Arg					
	145		150		155
Ser Ser Thr Tyr Val Gln Val Leu Ser Phe Pro Pro Glu Thr Thr Ile					
	165		170		175
Ser Val Pro Leu Pro His Ile Tyr Leu Ala Glu Leu Leu Gln Gly Gly					
	180		185		190
Gln Ser Pro Phe Gln Ala Thr Ala Ser Cys His Ile Val Ser Val Phe					
	195		200		205
Ser Leu Gln Leu Phe Trp Val Cys Ala Tyr Cys Thr Ser Ile Cys Arg					
	210		215		220
Gln Gly Lys Cys Thr Arg Leu Gly Ser Thr Cys Pro Thr Gln Thr Ala					
	225		230		235
Ile Ser Gln Ala Ile Ile Arg Leu Leu Val Glu Asp Gly Thr Ala Glu					
	245		250		255
Ala Val Val Thr Cys Arg Asn His His Val Ala Ala Ala Leu Gly Leu					
	260		265		270
Cys Pro Arg Glu Trp Ala Ser Leu Leu Asp Phe Val Gln Val Pro Gly					
	275		280		285
Arg Val Val Leu Gln Phe Ala Gly Pro Gly Ala Gln Leu Glu Ser Ser					
	290		295		300
Ala Arg Val Asp Glu Pro Met Thr Met Phe Leu Trp Thr Leu Cys Thr					
	305		310		315
Ser Pro Ser Val Leu Arg Pro Ile Val Leu Ser Phe Glu Leu Glu Arg					
	325		330		335
Lys Pro Ser Lys Ile Val Pro Leu Glu Pro Pro Arg Leu Gln Arg Phe					
	340		345		350
Gln Cys Gly Glu Leu Pro Phe Leu Thr His Val Asn Pro Arg Leu Arg					
	355		360		365
Leu Ser Cys Leu Ser Ile Arg Glu Ser Glu Tyr Ser Ser Ser Leu Gly					
	370		375		380
Ile Leu Ala Ser Ser Cys					
385		390			

<210> 2809

<211> 1502

<212> DNA

<213> Homo sapiens

<400> 2809

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120

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240
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360
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480
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1500
aa
1502

<210> 2810

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2810

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 Ala Cys Val Cys Ala Cys Val Arg Leu Cys Val Arg Leu Cys Ala Cys
 35 40 45
 Val Cys Ala Ser Val Cys Met Cys Ala Arg Ala Xaa Val Cys Val Cys
 50 55 60
 Thr Cys Val Xaa Leu Cys Thr Arg Val Cys Val Cys Val His Ala Cys
 65 70 75 80
 Val Cys Val Cys Ala Arg Ala Cys Thr Ser Pro Pro Glu His Leu Gly
 85 90 95
 Phe Gly Thr Arg Trp Phe
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<210> 2811

<211> 591

<212> DNA

<213> Homo sapiens

<400> 2811

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 120
 caaaggagac cataaagtgt aggatatttc ctggttagtg gctgccgggt aatcacgatg
 180
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 480
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<210> 2812

<211> 131

<212> PRT

<213> Homo sapiens

<400> 2812

Met His Pro Ser Ser Ser Ala Ser Gln Pro Ser Val Ala Arg Arg Gln
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 20 25 30
 Pro Ala Pro Ala Val Asp Glu Pro Gln Pro Xaa Ser Gln Ala Pro Pro

35 40 45
 Gly Pro Arg Val Pro Gly Pro Pro Arg Pro Trp Gly Ala Ala Pro Leu
 50 55 60
 Arg Pro Arg Pro Gly Glu Gly Asp Pro Val Thr Arg Glu Arg Ser Pro
 65 70 75 80
 Val Pro Gly Ala Thr Glu Met Pro Pro Pro Arg Pro Lys Val Pro Ala
 85 90 95
 Pro Pro Gly Pro Thr Gly Arg Ser Pro Arg Ala Ala Val Gly His His
 100 105 110
 Arg Ala Ala Gly Pro Pro Gly Cys Val Gly Pro Ser Leu Ser Gly Gln
 115 120 125
 Leu Gly Ser
 130

<210> 2813

<211> 2417

<212> DNA

<213> Homo sapiens

<400> 2813

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 120
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 720
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 780
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 1020

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1080
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1140
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<210> 2814

<211> 471

<212> PRT

<213> Homo sapiens

<400> 2814

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Trp Lys Glu Leu Ser Leu Lys Tyr Lys Gln Ser Phe Gln Glu Ala Arg
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Asp Glu Leu Val Glu Phe Gln Glu Gly Ser Arg Glu Leu Glu Ala Glu
      50           55           60
Leu Glu Ala Gln Leu Val Gln Ala Glu Gln Arg Asn Arg Asp Leu Gln
      65           70           75           80
Ala Asp Asn Gln Arg Leu Lys Tyr Glu Val Glu Ala Leu Lys Glu Lys
      85           90           95
Leu Glu His Gln Tyr Ala Gln Ser Tyr Lys Gln Val Ser Val Leu Glu
      100          105          110
Asp Asp Leu Ser Gln Thr Arg Ala Ile Lys Glu Gln Leu His Lys Tyr
      115          120          125
Val Arg Glu Leu Glu Gln Ala Asn Asp Asp Leu Glu Arg Ala Lys Arg
      130          135          140
Ala Thr Ile Val Ser Leu Glu Thr Leu Asn Lys Leu Asn Gln Ala Ile
      145          150          155          160
Glu Arg Asn Ala Phe Leu Glu Ser Glu Leu Asp Glu Lys Glu Ser Leu
      165          170          175
Leu Val Ser Val Gln Arg Leu Lys Asp Glu Ala Arg Asp Leu Arg Gln
      180          185          190
Glu Leu Ala Val Arg Glu Arg Gln Gln Glu Val Thr Arg Lys Ser Ala
      195          200          205
Pro Ser Ser Pro Thr Leu Asp Cys Glu Lys Met Asp Ser Ala Val Gln
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Ala Ser Leu Ser Leu Pro Ala Thr Pro Val Gly Lys Gly Thr Glu Asn
      225          230          235          240
Thr Phe Pro Ser Pro Lys Ala Ile Pro Asn Gly Phe Gly Thr Ser Pro
      245          250          255
Leu Thr Pro Ser Ala Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu
      260          265          270
Leu Arg Lys Val Gly Ala Leu Glu Ser Lys Leu Ala Ala Cys Arg Asn
      275          280          285
Phe Ala Lys Asp Gln Ala Ser Arg Lys Ser Tyr Ile Ser Gly Asn Val
      290          295          300
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      305          310          315          320
His Thr Ser Phe Phe Asp Lys Gly Ala Val Asn Gly Phe Asp Pro Ala
      325          330          335
Pro Pro Pro Pro Gly Leu Gly Ser Ser Arg Pro Ser Ser Ala Pro Gly
      340          345          350
Met Cys Leu Ser Val Cys Glu Cys Leu Ala Ser Arg Gly Ala Pro Ala
      355          360          365
Leu Leu Gln Gln Pro Arg Thr Pro Thr Pro His Pro Ser Val Pro Gly
      370          375          380
Pro Ser Pro Val Pro Leu Arg Leu Pro Pro His Gly Trp Gln Arg Ala
      385          390          395          400
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Val	Ser	His	Asp	Cys	Thr	Phe	Val	Gly	Arg	Lys	Val	Ile	His	Thr	Cys
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<210> 2815

<211> 1421

<212> DNA

<213> Homo sapiens

<400> 2815

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1200

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 1320
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<210> 2816

<211> 307

<212> PRT

<213> Homo sapiens

<400> 2816

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			20					25					30		
Val	Arg	Ala	His	Gly	Asp	Pro	Val	Ser	Glu	Ser	Phe	Val	Gln	Arg	Val
		35					40				45				
Tyr	Gln	Pro	Phe	Leu	Thr	Thr	Cys	Asp	Gly	His	Arg	Ala	Cys	Ser	Thr
	50					55				60					
Tyr	Arg	Thr	Ile	Tyr	Arg	Thr	Ala	Tyr	Arg	Arg	Ser	Pro	Gly	Leu	Ala
65				70					75					80	
Pro	Ala	Arg	Pro	Arg	Tyr	Ala	Cys	Cys	Pro	Gly	Trp	Lys	Arg	Thr	Ser
			85						90					95	
Gly	Leu	Pro	Gly	Ala	Cys	Gly	Ala	Ala	Ile	Cys	Gln	Pro	Pro	Cys	Arg
		100					105					110			
Asn	Gly	Gly	Ser	Cys	Val	Gln	Pro	Gly	Arg	Cys	Arg	Cys	Pro	Ala	Gly
	115					120					125				
Trp	Arg	Gly	Asp	Thr	Cys	Gln	Ser	Asp	Val	Asp	Glu	Cys	Ser	Ala	Arg
	130				135					140					
Arg	Gly	Gly	Cys	Pro	Gln	Arg	Cys	Val	Asn	Thr	Ala	Gly	Ser	Tyr	Trp
145				150					155					160	
Cys	Gln	Cys	Trp	Glu	Gly	His	Ser	Leu	Ser	Ala	Asp	Gly	Thr	Leu	Cys
			165					170					175		
Val	Pro	Lys	Gly	Gly	Pro	Pro	Arg	Val	Ala	Pro	Asn	Pro	Thr	Gly	Val
		180					185					190			
Asp	Ser	Ala	Met	Lys	Glu	Glu	Val	Gln	Arg	Leu	Gln	Ser	Arg	Val	Asp
	195					200					205				
Leu	Leu	Glu	Glu	Lys	Leu	Gln	Leu	Val	Leu	Ala	Pro	Leu	His	Ser	Leu
	210				215						220				
Ala	Ser	Gln	Ala	Gly	Ala	Trp	Ala	Pro	Gly	Pro	Arg	Gln	Pro	Pro	Gly
225				230					235					240	
Ala	Leu	Leu	Pro	Ala	Ala	Arg	Pro	His	Arg	Leu	Pro	Glu	Arg	Ala	Asp
			245					250					255		
Phe	Leu	Pro	Gly	Gly	Ala	Ala	Gly	Val	Leu	Leu	Leu	Gln	Glu	Arg	Leu
	260						265					270			
Xaa	Asp	Cys	Pro	Ala	Pro	Gln	Ala	Gly	Leu	Ser	Pro	Ser	Arg	Arg	Pro
	275					280					285				
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<210> 2817

<211> 219

<212> DNA

<213> Homo sapiens

<400> 2817

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120
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<210> 2818

<211> 73

<212> PRT

<213> Homo sapiens

<400> 2818

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20 25 30
Pro Gly Ala Ser Leu Gly Pro Gly Val Leu Leu Arg Ala Glu Phe His
35 40 45
Gln His Gln His Thr His Gln His Thr His Gln His Thr His Gln His
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Gln His Thr Phe Ala Pro Phe Thr Arg
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<210> 2819

<211> 730

<212> DNA

<213> Homo sapiens

<400> 2819

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120
ggaccctaaag ggcagaaggg ctccatgggg gccctgggg agcgggtgcaa gagccactac
180
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420

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<210> 2820

<211> 195

<212> PRT

<213> Homo sapiens

<400> 2820

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		20					25						30		
Ser	Ala	Gly	Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser
		35					40					45			
Met	Gly	Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser
		50				55					60				
Val	Gly	Arg	Glu	Ala	His	Ala	Gln	Gln	Pro	Leu	Leu	Pro	Asp	Val	Ile
65					70					75				80	
Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met	Phe	Thr
				85						90				95	
Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe	Ser	Leu	Asn
				100					105				110		
Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His	Ile	Met	Lys	Asn
		115					120					125			
Glu	Glu	Glu	Val	Val	Ile	Leu	Phe	Ala	Gln	Val	Gly	Asp	Arg	Ser	Ile
		130				135					140				
Met	Gln	Ser	Gln	Ser	Leu	Met	Leu	Glu	Leu	Arg	Glu	Gln	Asp	Gln	Val
145					150					155				160	
Trp	Val	Arg	Leu	Tyr	Lys	Gly	Glu	Arg	Glu	Asn	Ala	Ile	Phe	Ser	Glu
				165						170				175	
Glu	Leu	Asp	Thr	Tyr	Ile	Thr	Phe	Ser	Gly	Tyr	Leu	Val	Lys	His	Ala
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Thr	Glu	Pro													
		195													

<210> 2821

<211> 1746

<212> DNA

<213> Homo sapiens

<400> 2821

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360
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1746

<210> 2822

<211> 424

<212> PRT

<213> Homo sapiens

<400> 2822

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			20					25					30		
Leu	Ser	Asn	Ile	Ile	Asn	Lys	Leu	Leu	Glu	Thr	Lys	Asn	Glu	Leu	His
		35				40						45			
Lys	His	Val	Glu	Phe	Asp	Phe	Leu	Ile	Lys	Gly	Gln	Phe	Leu	Arg	Met
	50					55					60				
Pro	Leu	Asp	Lys	His	Met	Glu	Met	Glu	Asp	Ile	Ser	Ser	Glu	Glu	Val
65					70				75					80	
Val	Glu	Ile	Glu	Tyr	Val	Glu	Lys	Tyr	Thr	Ala	Pro	Gln	Pro	Glu	Gln
				85					90					95	
Cys	Met	Phe	His	Asp	Asp	Trp	Ile	Ser	Ser	Ile	Lys	Gly	Ala	Glu	Glu
			100					105					110		
Trp	Ile	Leu	Thr	Gly	Ser	Tyr	Gly	Lys	Thr	Ser	Arg	Ile	Trp	Ser	Leu
		115					120					125			
Glu	Gly	Lys	Ser	Ile	Met	Thr	Ile	Val	Gly	His	Thr	Asp	Val	Val	Lys
	130					135					140				
Asp	Val	Ala	Trp	Val	Lys	Lys	Asp	Ser	Leu	Ser	Cys	Leu	Leu	Xaa	Glu
145					150					155				160	
Cys	Phe	Tyr	Gly	Ser	Asp	Tyr	Ser	Leu	Met	Gly	Val	Glu	Cys	Arg	Glu
			165						170					175	
Lys	Gln	Ser	Glu	Ser	Pro	Thr	Leu	Leu	Xaa	Arg	Gly	His	Ala	Gly	Ser
			180					185					190		
Val	Asp	Ser	Ile	Ala	Val	Asp	Gly	Ser	Gly	Thr	Lys	Phe	Cys	Ser	Gly
		195					200					205			
Ser	Trp	Asp	Lys	Met	Leu	Lys	Ile	Trp	Ser	Thr	Val	Pro	Thr	Asp	Glu
	210					215					220				
Glu	Asp	Glu	Met	Glu	Glu	Ser	Thr	Asn	Arg	Pro	Arg	Lys	Lys	Gln	Lys
225					230						235			240	
Thr	Glu	Gln	Leu	Gly	Leu	Thr	Arg	Thr	Pro	Ile	Val	Thr	Leu	Ser	Gly
			245						250					255	
His	Met	Glu	Ala	Val	Ser	Ser	Val	Leu	Trp	Ser	Asp	Ala	Glu	Glu	Ile
			260					265						270	
Cys	Ser	Ala	Ser	Trp	Asp	His	Thr	Ile	Arg	Val	Trp	Asp	Val	Glu	Ser
		275					280					285			
Gly	Ser	Leu	Lys	Ser	Thr	Leu	Thr	Gly	Asn	Lys	Val	Phe	Asn	Cys	Ile
		290				295					300				
Ser	Tyr	Ser	Pro	Leu	Cys	Lys	Arg	Leu	Ala	Ser	Gly	Ser	Thr	Asp	Arg
305					310					315				320	
His	Ile	Arg	Leu	Trp	Asp	Pro	Arg	Thr	Lys	Asp	Gly	Ser	Leu	Val	Ser
			325						330					335	
Leu	Ser	Leu	Thr	Ser	His	Thr	Gly	Trp	Val	Thr	Ser	Val	Lys	Trp	Ser

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Pro Thr His Glu Gln Gln Leu Ile Ser Gly Ser Leu Asp Asn Ile Val
          355          360          365
Lys Leu Trp Asp Thr Arg Ser Cys Lys Ala Pro Leu Tyr Asp Leu Ala
          370          375          380
Ala His Glu Asp Lys Val Leu Ser Val Asp Trp Thr Asp Thr Gly Leu
385          390          395          400
Leu Leu Ser Gly Gly Ala Asp Asn Lys Leu Tyr Ser Tyr Arg Tyr Ser
          405          410          415
Pro Thr Thr Ser His Val Gly Ala
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<210> 2823

<211> 461

<212> DNA

<213> Homo sapiens

<400> 2823

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461

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<210> 2824

<211> 81

<212> PRT

<213> Homo sapiens

<400> 2824

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Asp Gln Val Pro Ser Ser Ser Leu Ala Pro Gln Ser His Trp Glu Thr
          20          25          30
Leu Gln Ala Gln Ala His Thr Gly Pro Ala Ser Pro Ala Ala Leu Pro
          35          40          45
Lys Gly Asp Ala Cys Asp Cys Val Cys Leu Pro Thr Gly Val Thr Thr
          50          55          60
His Pro Arg Pro Pro Glu Pro Gln His Glu Gly Ser Ala Pro Phe Pro
65          70          75          80
His

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<210> 2825
<211> 1520
<212> DNA
<213> Homo sapiens

<400> 2825
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120
gatggacatg tagagggtggc acgtttgctt ttggatagtg gtgctcaagt gaacatgcct
180
gcagattcat ttgaatctcc attgacgcta gctgcctgtg gaggacatgt tgaattggca
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<210> 2826

<211> 506

<212> PRT

<213> Homo sapiens

<400> 2826

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Thr	Ala	Leu	Met	Glu	Ala	Cys	Met	Asp	Gly	His	Val	Glu	Val	Ala	Arg
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Leu	Leu	Leu	Asp	Ser	Gly	Ala	Gln	Val	Asn	Met	Pro	Ala	Asp	Ser	Phe
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Val	Ala	Leu	Leu	Leu	Ser	Thr	Arg	Ser	Xaa	Ile	Ser	Met	His	Arg	Gln
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Lys	Lys	Leu	Lys	Lys	Leu	Leu	Thr	Leu	Ala	Cys	Cys	Gly	Gly	Phe	
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Leu	Glu	Val	Ala	Asp	Phe	Leu	Ile	Lys	Ala	Gly	Ala	Asp	Ile	Glu	Leu
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Gly	Cys	Ser	Thr	Pro	Leu	Met	Glu	Ala	Ala	Gln	Glu	Gly	His	Leu	Glu
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385          390          395          400
Ser Ser Ser His Leu Pro Ala Asn Ser Gln Asp Val Gln Gly Tyr Ile
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Thr Asn Gln Ser Pro Glu Ser Ile Val Glu Glu Ala Gln Gly Lys Leu
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Thr Glu Leu Glu Gln Arg Ile Lys Glu Ala Ile Glu Lys Asn Ala Gln
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Ile Glu Glu Leu Asn Lys Thr Arg Glu Glu Gln Ile Gln Lys Lys Gln
465          470          475          480
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<210> 2827

<211> 481

<212> DNA

<213> Homo sapiens

<400> 2827

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<210> 2828

<211> 160

<212> PRT

<213> Homo sapiens

<400> 2828

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Leu Tyr Pro Gly Gly Cys Gln Gln Leu Leu His Leu Cys Val Gln Gln			
	35	40	45
Pro Leu Gln Leu Leu Gln Val Glu Phe Leu Arg Leu Asn Thr His Glu			
	50	55	60
Asp Pro Gln Leu Leu Glu Ala Thr Leu Ala Gln Leu Pro Gln Asn Leu			
65	70	75	80
Ser Cys Leu Arg Ser Leu Val Leu Lys Arg Gly Gln Arg Arg Asp Thr			
	85	90	95
Leu Gly Ala Cys Leu Arg Gly Ala Leu Thr Asn Leu Pro Ala Gly Leu			
	100	105	110
Ser Gly Leu Ala His Leu Ala His Leu Asp Leu Ser Phe Asn Ser Leu			
	115	120	125
Glu Thr Leu Pro Ala Cys Val Leu Gln Met Arg Gly Leu Gly Ala Leu			
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<212> DNA

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<400> 2829

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<210> 2830

<211> 668

<212> PRT

<213> Homo sapiens

<400> 2830

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			20					25					30		
Lys	Gln	Gln	Asp	Leu	Ser	Ile	Ala	Met	Val	Val	Thr	Ser	Arg	Glu	Val
		35					40					45			
Leu	Ser	Ala	Leu	Ser	Gln	Leu	Val	Pro	Cys	Val	Gly	Cys	Arg	Arg	Ser
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Ser Lys Leu Asn Asp Met Ile Asp Ala Ile Pro Lys Ser Lys Lys Asn
      115          120          125
Lys Arg Cys Gln Leu His Ser Leu Asp Thr His Lys Pro Lys Pro Leu
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Gly Gly Cys Trp Met Asp Val Trp Glu Leu Met Ser Gln Glu Cys Arg
      145          150          155          160
Asp Glu Val Val Leu Ile Asp Ser Ser Cys Leu Leu Glu Thr Leu Glu
      165          170          175
Thr Tyr Leu Arg Lys His Arg Phe Cys Thr Asp Cys Lys Asn Lys Val
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Leu Arg Ala Tyr Asn Ile Leu Ile Gly Glu Leu Asp Cys Ser Lys Glu
      195          200          205
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      225          230          235          240
Leu Gly Arg Ala Glu Pro Glu Phe Ala Gly Tyr Glu Arg Arg Glu
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Arg His Ala Lys Thr Ile Asp Ile Ala Gln Glu Glu Val Leu Thr Cys
      260          265          270
Leu Gly Ile His Leu Tyr Glu Arg Leu His Arg Ile Trp Gln Lys Leu
      275          280          285
Arg Ala Glu Glu Gln Thr Trp Gln Met Leu Phe Tyr Leu Gly Val Asp
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Ala Leu Arg Lys Ser Phe Glu Met Thr Val Glu Lys Val Gln Gly Ile
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Ser Arg Leu Glu Gln Leu Cys Glu Glu Phe Ser Glu Glu Glu Arg Val
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Asn Gly Ser Asp Cys Gly Tyr Ser Ser Ser Met Glu Gly Ser Glu Thr
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Gly Ser Arg Glu Gly Ser Asp Val Ala Cys Thr Glu Gly Ile Cys Asn
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His Asp Glu His Gly Asp Ser Cys Val His His Cys Glu Asp Lys
      465          470          475          480
Glu Asp Asp Gly Asp Ser Cys Val Glu Cys Trp Ala Asn Ser Glu Glu
      485          490          495
Asn Asp Thr Lys Gly Lys Asn Lys Lys Lys Lys Lys Lys Ser Lys Ile

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Pro	Gly	Asn	Arg	Glu	Thr	Ser	Gly	Asn	Thr	Met	His	Thr	Val	Phe	His
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Gln	Phe	Ala	Glu	Pro	Thr	Glu	Thr	Leu	Phe	Gly	Pro	Asp	Ser	Gly	Lys
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Gly	Ala	Lys	Ser	Leu	Val	Glu	Leu	Leu	Asp	Glu	Ser	Glu	Cys	Thr	Ser
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Asp	Glu	Glu	Ile	Phe	Ile	Ser	Gln	Asp	Glu	Ile	Gln	Ser	Phe	Met	Ala
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<211> 3986

<212> DNA

<213> Homo sapiens

<400> 2831

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<210> 2832
 <211> 611
 <212> PRT
 <213> Homo sapiens

<400> 2832

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 20          25          30
Gly Thr Arg Thr Ser Ser Gly Arg Leu Arg Arg Leu Gly Asp Ser Ser
 35          40          45
Gly Pro Ala Leu Lys Arg Ser Phe Glu Val Glu Glu Val Glu Thr Pro
 50          55          60
Asn Ser Thr Pro Pro Arg Arg Val Gln Thr Pro Leu Leu Arg Ala Thr
 65          70          75          80
Val Ala Ser Ser Thr Gln Lys Phe Gln Asp Leu Gly Val Lys Asn Ser
 85          90          95
Glu Pro Ser Ala Arg His Val Asp Ser Leu Ser Gln Arg Ser Pro Lys
100          105          110
Ala Ser Leu Arg Arg Val Glu Leu Ser Gly Pro Lys Ala Ala Glu Pro
115          120          125
Val Ser Arg Arg Thr Glu Leu Ser Ile Asp Ile Ser Ser Lys Gln Val
130          135          140
Glu Asn Ala Gly Ala Ile Gly Pro Ser Arg Phe Gly Leu Lys Arg Ala
145          150          155          160
Glu Val Leu Gly His Lys Thr Pro Glu Pro Ala Pro Arg Arg Thr Glu
165          170          175
Ile Thr Ile Val Lys Pro Gln Glu Ser Ala His Arg Arg Met Glu Pro
180          185          190
Pro Ala Ser Lys Val Pro Glu Val Pro Thr Ala Pro Ala Thr Asp Ala
195          200          205
Ala Pro Lys Arg Val Glu Ile Gln Met Pro Lys Pro Ala Glu Ala Pro
210          215          220
Thr Ala Pro Ser Pro Ala Gln Thr Leu Glu Asn Ser Glu Pro Ala Pro
225          230          235          240
Val Ser Gln Leu Gln Ser Arg Leu Glu Pro Lys Pro Gln Pro Pro Val
245          250          255
Ala Glu Ala Thr Pro Arg Ser Gln Glu Ala Thr Glu Ala Ala Pro Ser
260          265          270
Cys Val Gly Asp Met Ala Asp Thr Pro Arg Asp Ala Gly Leu Lys Gln
275          280          285
Ala Pro Ala Ser Arg Asn Glu Lys Ala Pro Val Asp Phe Gly Tyr Val
290          295          300
Gly Ile Asp Ser Ile Leu Glu Gln Met Arg Arg Lys Ala Met Lys Gln
305          310          315          320
Gly Phe Glu Phe Asn Ile Met Val Val Gly Gln Ser Gly Leu Gly Lys
325          330          335
Ser Thr Leu Ile Asn Thr Leu Phe Lys Ser Lys Ile Ser Arg Lys Ser
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Val Gln Pro Thr Ser Glu Glu Arg Ile Pro Lys Thr Ile Glu Ile Lys
355          360          365
Ser Ile Thr His Asp Ile Glu Glu Lys Gly Val Arg Met Lys Leu Thr

```

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Val Ile Asp Thr Pro Gly Phe Gly Asp His Ile Asn Asn Glu Asn Cys
385              390              395              400
Trp Gln Pro Ile Met Lys Phe Ile Asn Asp Gln Tyr Glu Lys Tyr Leu
      405              410              415
Gln Glu Glu Val Asn Ile Asn Arg Lys Lys Arg Ile Pro Asp Thr Arg
      420              425              430
Val His Cys Cys Leu Tyr Phe Ile Pro Ala Thr Gly His Ser Leu Arg
      435              440              445
Pro Leu Asp Ile Glu Phe Met Lys Arg Leu Ser Lys Val Val Asn Ile
      450              455              460
Val Pro Val Ile Ala Lys Ala Asp Thr Leu Thr Leu Glu Glu Arg Val
465              470              475              480
His Phe Lys Gln Arg Ile Thr Ala Asp Leu Leu Ser Asn Gly Ile Asp
      485              490              495
Val Tyr Pro Gln Lys Glu Phe Asp Glu Asp Ser Glu Asp Arg Leu Val
      500              505              510
Asn Glu Lys Phe Arg Glu Met Ile Pro Phe Ala Val Val Gly Ser Asp
      515              520              525
His Glu Tyr Gln Val Asn Gly Lys Arg Ile Leu Gly Arg Lys Thr Lys
      530              535              540
Trp Gly Thr Ile Glu Val Glu Asn Thr Thr His Cys Glu Phe Ala Tyr
545              550              555              560
Leu Arg Asp Leu Leu Ile Arg Thr His Met Gln Asn Ile Lys Asp Ile
      565              570              575
Thr Ser Ser Ile His Phe Glu Ala Tyr Arg Val Lys Arg Leu Asn Glu
      580              585              590
Gly Ser Ser Ala Met Ala Asn Gly Val Glu Glu Lys Glu Pro Glu Ala
      595              600              605
Pro Glu Met
610

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<210> 2833

<211> 420

<212> DNA

<213> Homo sapiens

<400> 2833

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120
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180
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240
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300
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<210> 2834

<211> 117
 <212> PRT
 <213> Homo sapiens

<400> 2834
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 Leu Leu Arg Leu Leu Arg Ser Pro Thr Leu Arg Gly His Gly Gly Ala
 20 25 30
 Ser Gly Arg Asn Val Thr Thr Gly Ser Leu Gly Glu Pro Gln Trp Leu
 35 40 45
 Arg Val Ala Thr Gly Gly Arg Pro Gly Thr Ser Pro Ala Leu Phe Ser
 50 55 60
 Gly Arg Gly Ala Ala Thr Gly Gly Arg Gln Gly Gly Arg Phe Asp Thr
 65 70 75 80
 Lys Cys Leu Ala Ala Ala Thr Trp Gly Arg Leu Pro Gly Pro Glu Glu
 85 90 95
 Thr Leu Pro Gly Gln Asp Ser Trp Asn Gly Val Pro Ser Arg Ala Gly
 100 105 110
 Leu Gly Met Cys Ala
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<210> 2835
 <211> 938
 <212> DNA
 <213> Homo sapiens

<400> 2835
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 120
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 180
 tatgtagaat acacttcaga attgtctctgc tcaaggacaa tgaagctgag gtctctgtcc
 240
 ttattgactc agggttgctg ctcttgggga cattaacccc ccaacacttc tagcttgccc
 300
 agtgcaactga ctgagcacac agctgtggcc accagagaac ctctttgggc tgtgatacag
 360
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 420
 acgggcaggc actgctggca tctgctaacc ccggaggccc atacttcaga accggtcagc
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 660
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 720
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 780

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 840
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<210> 2836

<211> 178

<212> PRT

<213> Homo sapiens

<400> 2836

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Pro	Glu	Ala	His	Thr	Ser	Glu	Pro	Val	Ser	Trp	Ala	Lys	Ala	Ser	Leu
			20					25					30		
Arg	Pro	Ser	Gly	Ser	His	Gly	Gln	Met	Ser	Gly	Asp	Thr	Glu	Ser	Glu
			35				40					45			
Thr	Leu	Ser	Val	Arg	Gly	Glu	Asp	Ile	Gly	Glu	Asp	Leu	Phe	Ser	Glu
			50			55					60				
Ala	Leu	Gly	Arg	Ala	Val	Gly	Gln	Trp	Ala	Gly	Ala	Lys	Leu	Leu	Asp
65					70					75				80	
His	Gly	Cys	Val	Glu	Ser	Ser	Ile	Leu	Asp	Ser	Ser	Ala	Gly	Ser	Ala
			85					90					95		
Pro	His	Tyr	Glu	Val	Phe	Val	Ala	Leu	Arg	Gly	Leu	Arg	Asn	Leu	Ser
			100					105					110		
Glu	Glu	Asn	Arg	Asp	Lys	Leu	Asp	His	Cys	Leu	Gln	Glu	Ala	Ser	Pro
		115					120					125			
Arg	Tyr	Lys	Ser	Leu	Arg	Phe	Trp	Gly	Ser	Val	Gly	Pro	Ala	Glu	Ser
		130				135					140				
Thr	Trp	Trp	Cys	Pro	Glu	Ser	Ser	Pro	Ala	Pro	Pro	Pro	Ser	Ser	Pro
145					150					155				160	
Gln	Arg	Pro	Pro	Arg	Pro	Ser	Leu	Trp	Asp	Leu	Ser	Gly	Trp	Gly	Val
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Leu Gly

<210> 2837

<211> 1250

<212> DNA

<213> Homo sapiens

<400> 2837

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 180
 gaattccagg agggaagccg agaatatgaa gctgaattgg agacgcagct gcaacaaatt
 240
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 300

atcaaggaga agtttgaagt gcagcactct gaaggctacc ggcagatctc agccttggag
 360
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 420
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 540
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 660
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 720
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<210> 2838

<211> 370

<212> PRT

<213> Homo sapiens

<400> 2838

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Ile	Ser	Ser	Pro	Val	Phe	Thr	Met	Glu	Asp	Ser	Gly	Lys	Thr	Phe	Ser
			20					25					30		
Ser	Glu	Glu	Glu	Glu	Ala	Asn	Tyr	Trp	Lys	Asp	Leu	Ala	Met	Thr	Tyr
		35				40					45				
Lys	Gln	Arg	Ala	Glu	Asn	Thr	Gln	Glu	Glu	Leu	Arg	Glu	Phe	Gln	Glu
		50			55					60					
Gly	Ser	Arg	Glu	Tyr	Glu	Ala	Glu	Leu	Glu	Thr	Gln	Leu	Gln	Gln	Ile
65					70				75					80	
Glu	Thr	Arg	Asn	Arg	Asp	Leu	Leu	Ser	Glu	Asn	Asn	Arg	Leu	Arg	Met
			85					90					95		
Glu	Leu	Glu	Thr	Ile	Lys	Glu	Lys	Phe	Glu	Val	Gln	His	Ser	Glu	Gly
			100					105					110		
Tyr	Arg	Gln	Ile	Ser	Ala	Leu	Glu	Asp	Asp	Leu	Ala	Gln	Thr	Lys	Ala

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      115              120              125
Ile Lys Asp Gln Leu Gln Lys Tyr Ile Arg Glu Leu Glu Gln Ala Asn
      130              135              140
Asp Ala Leu Glu Arg Ala Lys Arg Ala Thr Ile Met Ser Leu Glu Asp
      145              150              155              160
Phe Glu Gln Arg Leu Asn Gln Ala Ile Glu Arg Asn Ala Phe Leu Glu
      165              170              175
Ser Glu Leu Asp Glu Lys Glu Asn Leu Leu Glu Ser Val Gln Arg Leu
      180              185              190
Lys Asp Glu Ala Arg Asp Leu Arg Gln Glu Leu Ala Val Gln Gln Lys
      195              200              205
Gln Glu Lys Pro Arg Thr Pro Met Pro Ser Ser Val Glu Ala Glu Arg
      210              215              220
Thr Asp Thr Ala Val Gln Ala Thr Gly Ser Val Pro Ser Thr Pro Ile
      225              230              235              240
Ala His Arg Gly Pro Ser Ser Ser Leu Asn Thr Pro Gly Ser Phe Arg
      245              250              255
Arg Gly Leu Asp Asp Xaa His Arg Gly Thr Pro Leu Thr Pro Ala Ala
      260              265              270
Arg Ile Ser Ala Leu Asn Ile Val Gly Asp Leu Leu Arg Lys Val Gly
      275              280              285
Ala Leu Glu Ser Lys Leu Ala Ser Cys Arg Asn Leu Val Tyr Asp Gln
      290              295              300
Ser Pro Asn Arg Thr Gly Gly Pro Ala Ser Gly Arg Ser Ser Lys Asn
      305              310              315              320
Arg Asp Gly Gly Glu Arg Arg Pro Ser Ser Thr Ser Val Pro Leu Gly
      325              330              335
Asp Lys Gly Ser Val Pro Ser Asn Lys Pro Leu Ala Gly Gly Glu Asn
      340              345              350
Pro Pro Ala Pro Gly Lys Arg His Ser Pro Pro Ala His Ser His Val
      355              360              365
Ser Phe
      370

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<210> 2839

<211> 606

<212> DNA

<213> Homo sapiens

<400> 2839

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120
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300
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360
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420

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<210> 2840

<211> 202

<212> PRT

<213> Homo sapiens

<400> 2840

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Ile	Met	Gly	Gly	Cys	Gln	Ile	Gln	Phe	Thr	Val	Ala	Ile	Asp	Phe	Ala
		20						25					30		
Ala	Thr	Asn	Gly	Asp	Pro	Arg	Asn	Ser	Cys	Ser	Leu	His	Tyr	Ile	His
		35					40					45			
Pro	Tyr	Gln	Pro	Asn	Glu	Tyr	Leu	Lys	Ala	Leu	Val	Ala	Val	Gly	Glu
	50				55					60					
Ile	Cys	Gln	Asp	Tyr	Asp	Ser	Asp	Lys	Met	Phe	Pro	Ala	Phe	Gly	Phe
65					70				75					80	
Gly	Ala	Arg	Ile	Pro	Pro	Glu	Tyr	Thr	Val	Ser	His	Asp	Phe	Ala	Ile
			85					90					95		
Asn	Phe	Asn	Glu	Asp	Asn	Pro	Glu	Cys	Ala	Gly	Ile	Gln	Gly	Val	Val
		100						105					110		
Glu	Ala	Tyr	Gln	Ser	Cys	Leu	Pro	Lys	Leu	Gln	Leu	Tyr	Gly	Pro	Thr
		115					120					125			
Asn	Ile	Ala	Pro	Ile	Ile	Gln	Lys	Val	Ala	Lys	Ser	Ala	Ser	Glu	Glu
	130				135					140					
Thr	Asn	Thr	Lys	Glu	Ala	Ser	Gln	Tyr	Phe	Ile	Leu	Leu	Ile	Leu	Thr
145				150					155					160	
Asp	Gly	Val	Ile	Thr	Asp	Met	Gly	Asp	Thr	Arg	Glu	Ala	Ile	Val	His
			165					170					175		
Ala	Ser	His	Leu	Pro	Met	Ser	Val	Ile	Ile	Val	Gly	Val	Gly	Asn	Ala
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Asp	Phe	Ser	Asp	Met	Gln	Met	Leu	Asp	Gly						
	195					200									

<210> 2841

<211> 2065

<212> DNA

<213> Homo sapiens

<400> 2841

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 120
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240
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720
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 1920
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 2040
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 2065

<210> 2842

<211> 540

<212> PRT

<213> Homo sapiens

<400> 2842

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			20					25					30		
Pro	Pro	Val	Gly	Thr	Gly	Arg	Ser	Pro	Arg	Lys	Arg	Thr	Thr	Ser	Gln
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Cys	Lys	Ser	Glu	Pro	Pro	Leu	Leu	Arg	Thr	Ser	Lys	Arg	Thr	Ile	Tyr
	50					55				60					
Thr	Ala	Gly	Arg	Pro	Pro	Trp	Tyr	Asn	Glu	His	Gly	Thr	Gln	Ser	Lys
65				70						75				80	
Glu	Ala	Phe	Ala	Ile	Gly	Leu	Gly	Gly	Gly	Ser	Ala	Ser	Gly	Lys	Thr
				85				90						95	
Thr	Val	Ala	Arg	Met	Ile	Ile	Glu	Ala	Leu	Asp	Val	Pro	Trp	Val	Val
			100					105					110		
Leu	Leu	Ser	Met	Asp	Ser	Phe	Tyr	Lys	Val	Leu	His	Ser	Leu	Pro	His
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Gln	Val	Leu	Thr	Glu	Gln	Gln	Glu	Gln	Ala	Ala	His	Asn	Asn	Phe	
		130				135					140				
Asn	Phe	Asp	His	Pro	Asp	Ala	Phe	Asp	Phe	Asp	Leu	Ile	Ile	Ser	Thr
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Leu	Lys	Lys	Leu	Lys	Gln	Gly	Lys	Ser	Val	Lys	Val	Pro	Ile	Tyr	Asp
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Phe	Thr	Thr	His	Ser	Arg	Lys	Lys	Asp	Trp	Lys	Thr	Leu	Tyr	Gly	Ala
			180					185					190		
Asn	Val	Ile	Ile	Phe	Glu	Gly	Ile	Met	Ala	Phe	Ala	Asp	Lys	Thr	Leu
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Leu	Glu	Leu	Leu	Asp	Met	Lys	Ile	Phe	Val	Asp	Thr	Asp	Ser	Asp	Ile
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Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Asp	Ile	Ser	Glu	Arg	Gly	Arg	Asp
225					230					235				240	
Ile	Glu	Gly	Val	Ile	Lys	Gln	Tyr	Asn	Lys	Phe	Val	Lys	Pro	Ser	Phe
			245						250					255	
Asp	Gln	Tyr	Ile	Gln	Pro	Thr	Met	Arg	Leu	Ala	Asp	Ile	Val	Val	Pro
	260						265						270		
Arg	Gly	Ser	Gly	Asn	Thr	Val	Ala	Ile	Asp	Leu	Ile	Val	Gln	His	Val
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His	Ser	Gln	Leu	Glu	Glu	Arg	Glu	Leu	Ser	Val	Arg	Ala	Ala	Leu	Ala

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      290      295      300
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Ser Thr Pro Gln Val Arg Gly Met His Thr Ile Ile Arg Asp Lys Glu
      325      330      335
Thr Ser Arg Asp Glu Phe Ile Phe Tyr Ser Lys Arg Leu Met Arg Leu
      340      345      350
Leu Ile Glu His Ala Leu Ser Phe Leu Pro Phe Gln Asp Cys Val Val
      355      360      365
Gln Thr Pro Gln Gly Gln Asp Tyr Ala Gly Lys Cys Tyr Ala Gly Lys
      370      375      380
Gln Ile Thr Gly Val Ser Ile Leu Arg Ala Gly Glu Thr Met Glu Pro
385      390      395      400
Ala Leu Arg Ala Val Cys Lys Asp Val Arg Ile Gly Thr Ile Leu Ile
      405      410      415
Gln Thr Asn Gln Leu Thr Gly Glu Pro Glu Leu His Tyr Leu Arg Leu
      420      425      430
Pro Lys Asp Ile Ser Asp Asp His Val Ile Leu Met Asp Cys Thr Val
      435      440      445
Ser Thr Gly Ala Ala Ala Met Met Ala Val Arg Val Leu Leu Asp His
      450      455      460
Asp Val Pro Glu Asp Lys Ile Phe Leu Leu Ser Leu Leu Met Ala Glu
465      470      475      480
Met Gly Val His Ser Val Ala Tyr Ala Phe Pro Arg Val Arg Ile Ile
      485      490      495
Thr Thr Ala Val Asp Lys Arg Val Asn Asp Leu Phe Arg Ile Ile Pro
      500      505      510
Gly Ile Gly Asn Phe Gly Asp Arg Tyr Phe Gly Thr Asp Ala Val Pro
      515      520      525
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<210> 2843

<211> 497

<212> DNA

<213> Homo sapiens

<400> 2843

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180
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300
cccacagggg ccctgctgtc tacaccgag tttgagatgc ttcagaatcc cctgggtctc
360
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497

<210> 2844
<211> 165
<212> PRT
<213> Homo sapiens

<400> 2844
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35 40 45
Ser Ser Lys Phe Gln Glu Gly Ala Glu Met Leu Leu Asn Pro Glu Glu
50 55 60
Lys Ser Pro Leu Asn Ile Ser Val Gly Val His Pro Leu Asp Ser Phe
65 70 75 80
Thr Gln Gly Phe Gly Glu Gln Pro Thr Gly Asp Leu Pro Ile Gly Pro
85 90 95
Pro Phe Glu Met Pro Thr Gly Ala Leu Leu Ser Thr Pro Gln Phe Glu
100 105 110
Met Leu Gln Asn Pro Leu Gly Leu Thr Gly Ala Leu Arg Gly Pro Gly
115 120 125
Arg Arg Gly Gly Arg Ala Arg Gly Gly Gln Gly Pro Arg Pro Asn Ile
130 135 140
Cys Gly Ile Trp Gly Lys Ser Phe Gly Arg Asp Tyr Pro Asp Pro Ala
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Gln Ala Ser Thr Pro
165

<210> 2845
<211> 934
<212> DNA
<213> Homo sapiens

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240
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300
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360
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420
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480

gtgggggaga cagggcaggg aaggtgagca gcggtctgag agtcccttgt ggcacctcgt
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<210> 2846

<211> 149

<212> PRT

<213> Homo sapiens

<400> 2846

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Leu	Pro	Cys	Pro	Leu	Gly	Ser	Gly	Arg	Leu	Trp	Leu	Met	Pro	Thr	Arg
		20						25					30		
Cys	His	Lys	Gly	Leu	Ser	Asp	Arg	Cys	Ser	Pro	Ser	Leu	Pro	Cys	Leu
		35					40					45			
Pro	His	Arg	Pro	Ser	Pro	Pro	Glu	Pro	Ala	Phe	Leu	Pro	Gln	His	Leu
		50				55					60				
Pro	Ser	Leu	Ala	Thr	Gly	Tyr	Ile	Cys	Val	Asp	Cys	Leu	Ser	Leu	His
65					70					75				80	
Gly	Asn	Val	Arg	Thr	Ile	Phe	Val	Cys	Cys	Gly	Thr	Ala	Ala	Leu	Arg
				85					90					95	
Ala	Ala	Ser	Ser	Thr	Gln	Val	Ala	Leu	Asp	Thr	Asp	Cys	Thr	Gln	Gly
			100					105						110	
Glu	Leu	Gly	Leu	Ile	Thr	Pro	Leu	Thr	Arg	Gly	Glu	Thr	Leu	Gln	Leu
		115					120						125		
Glu	Val	Thr	Phe	Ile	Pro	Leu	Gln	Leu	Arg	Pro	Phe	His	Ser	Pro	Arg
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<210> 2847

<211> 2830

<212> DNA

<213> Homo sapiens

<400> 2847

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 120

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420
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 2700
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<210> 2848

<211> 856

<212> PRT

<213> Homo sapiens

<400> 2848

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			20					25					30		
Thr	Ser	Ala	Pro	Leu	Ile	Arg	Arg	Gln	Leu	Ser	His	Asp	His	Glu	Ser
		35				40					45				
Val	Gly	Pro	Pro	Ser	Leu	Asp	Ala	Gln	Pro	Asn	Ser	Lys	Thr	Glu	Arg
	50					55				60					
Ser	Lys	Ser	Tyr	Asp	Glu	Gly	Leu	Asp	Asp	Tyr	Arg	Glu	Asp	Ala	Lys

65					70					75				80	
Leu	Ser	Phe	Lys	His	Val	Ser	Ser	Leu	Lys	Gly	Ile	Lys	Ile	Ala	Asp
				85					90					95	
Ser	Gln	Lys	Ser	Ser	Glu	Asp	Ser	Gly	Ser	Arg	Lys	Asp	Ser	Ser	Ser
		100						105					110		
Glu	Val	Phe	Ser	Asp	Ala	Ala	Lys	Glu	Gly	Trp	Leu	His	Phe	Arg	Pro
		115					120					125			
Leu	Val	Thr	Asp	Lys	Gly	Lys	Arg	Val	Gly	Gly	Ser	Ile	Arg	Pro	Trp
		130				135					140				
Lys	Gln	Met	Tyr	Val	Val	Leu	Arg	Gly	His	Ser	Leu	Tyr	Leu	Tyr	Lys
145					150					155					160
Asp	Lys	Arg	Glu	Gln	Thr	Thr	Pro	Ser	Glu	Glu	Gln	Pro	Ile	Ser	
				165					170				175		
Val	Asn	Ala	Cys	Leu	Ile	Asp	Ile	Ser	Tyr	Ser	Glu	Thr	Lys	Arg	Lys
		180						185					190		
Asn	Val	Phe	Arg	Leu	Thr	Thr	Ser	Asp	Cys	Glu	Cys	Leu	Phe	Gln	Ala
		195					200					205			
Glu	Asp	Arg	Asp	Asp	Met	Leu	Ala	Trp	Ile	Lys	Thr	Ile	Gln	Glu	Ser
		210			215						220				
Ser	Asn	Leu	Asn	Glu	Glu	Asp	Thr	Gly	Val	Thr	Asn	Arg	Asp	Leu	Ile
225					230					235					240
Ser	Arg	Arg	Ile	Lys	Glu	Tyr	Asn	Asn	Leu	Met	Ser	Lys	Ala	Glu	Gln
				245					250					255	
Leu	Pro	Lys	Thr	Pro	Arg	Gln	Ser	Leu	Ser	Ile	Arg	Gln	Thr	Leu	Leu
			260					265					270		
Gly	Ala	Lys	Ser	Glu	Pro	Lys	Thr	Gln	Ser	Pro	His	Ser	Pro	Lys	Glu
		275					280					285			
Glu	Ser	Glu	Arg	Lys	Leu	Leu	Ser	Lys	Asp	Asp	Thr	Ser	Pro	Pro	Lys
		290				295					300				
Asp	Lys	Gly	Thr	Trp	Arg	Lys	Gly	Ile	Pro	Ser	Ile	Met	Arg	Lys	Thr
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Phe	Glu	Lys	Lys	Pro	Thr	Ala	Thr	Gly	Thr	Phe	Gly	Val	Arg	Leu	Asp
				325					330					335	
Asp	Cys	Pro	Pro	Ala	His	Thr	Asn	Arg	Tyr	Ile	Pro	Leu	Ile	Val	Asp
			340					345					350		
Ile	Cys	Cys	Lys	Leu	Val	Glu	Glu	Arg	Gly	Leu	Glu	Tyr	Thr	Gly	Ile
		355					360					365			
Tyr	Arg	Val	Pro	Gly	Asn	Asn	Ala	Ala	Ile	Ser	Ser	Met	Gln	Glu	Glu
		370				375					380				
Leu	Asn	Lys	Gly	Met	Ala	Asp	Ile	Asp	Ile	Gln	Asp	Asp	Lys	Trp	Arg
385					390					395					400
Asp	Leu	Asn	Val	Ile	Ser	Ser	Leu	Leu	Lys	Ser	Phe	Phe	Arg	Lys	Leu
				405					410					415	
Pro	Glu	Pro	Leu	Phe	Thr	Asn	Asp	Lys	Tyr	Ala	Asp	Phe	Ile	Glu	Ala
			420					425					430		
Asn	Arg	Lys	Glu	Asp	Pro	Leu	Asp	Arg	Leu	Lys	Thr	Leu	Lys	Arg	Leu
		435					440					445			
Ile	His	Asp	Leu	Pro	Glu	His	His	Tyr	Glu	Thr	Leu	Lys	Phe	Leu	Ser
		450				455					460				
Ala	His	Leu	Lys	Thr	Val	Ala	Glu	Asn	Ser	Glu	Lys	Asn	Lys	Met	Glu
465					470					475					480
Pro	Arg	Asn	Leu	Ala	Ile	Val	Phe	Gly	Pro	Thr	Leu	Val	Arg	Thr	Ser
				485					490					495	
Glu	Asp	Asn	Met	Thr	His	Met	Val	Thr	His	Met	Pro	Asp	Gln	Tyr	Lys

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      530      535      540
Ser Gln Pro Val Pro Asn Ile Asp His Leu Leu Thr Asn Ile Gly Arg
545      550      555      560
Thr Gly Val Ser Pro Gly Asp Val Ser Asp Ser Ala Thr Ser Asp Ser
      565      570      575
Thr Lys Ser Lys Gly Ser Trp Gly Ser Gly Lys Asp Gln Tyr Ser Arg
      580      585      590
Glu Leu Leu Val Ser Ser Ile Phe Ala Ala Ala Ser Arg Lys Arg Lys
      595      600      605
Lys Pro Lys Glu Lys Ala Gln Pro Ser Ser Ser Glu Asp Glu Leu Asp
      610      615      620
Asn Val Phe Phe Lys Lys Glu Asn Val Glu Gln Cys His Asn Asp Thr
625      630      635      640
Lys Glu Glu Ser Lys Lys Glu Ser Glu Thr Leu Gly Arg Lys Gln Lys
      645      650      655
Ile Ile Ile Ala Lys Glu Asn Ser Thr Arg Lys Asp Pro Ser Thr Thr
      660      665      670
Lys Asp Glu Lys Ile Ser Leu Gly Lys Glu Ser Thr Pro Ser Glu Glu
      675      680      685
Pro Ser Pro Pro His Asn Ser Lys His Asn Lys Ser Pro Thr Leu Ser
      690      695      700
Cys Arg Phe Ala Ile Leu Lys Glu Ser Pro Arg Ser Leu Leu Ala Gln
705      710      715      720
Lys Ser Ser His Leu Glu Glu Thr Gly Ser Asp Ser Gly Thr Leu Leu
      725      730      735
Ser Thr Ser Ser Gln Ala Ser Leu Ala Arg Phe Ser Met Lys Lys Ser
      740      745      750
Thr Ser Pro Glu Thr Lys His Ser Glu Phe Leu Ala Asn Val Ser Thr
      755      760      765
Ile Thr Ser Asp Tyr Ser Thr Thr Ser Ser Ala Thr Tyr Leu Thr Ser
      770      775      780
Leu Asp Ser Ser Arg Leu Ser Pro Glu Val Gln Ser Val Ala Glu Ser
785      790      795      800
Lys Gly Asp Glu Ala Asp Asp Glu Arg Ser Glu Leu Ile Ser Glu Gly
      805      810      815
Arg Pro Val Glu Thr Asp Ser Gly Asn Glu Phe Pro Ile Phe Pro Thr
      820      825      830
Ala Leu Thr Ser Glu Arg Leu Phe Arg Gly Glu Leu Gln Lys Val Thr
      835      840      845
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<210> 2849

<211> 380

<212> DNA

<213> Homo sapiens

<400> 2849

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<210> 2850

<211> 76

<212> PRT

<213> Homo sapiens

<400> 2850

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			20					25					30		
Glu	Glu	Asp	Lys	Lys	Asp	Gly	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys
		35				40					45				
Ala	Val	Gln	Asp	His	Lys	Glu	Pro	Ser	Asp	Lys	Pro	Gln	Lys	Ala	Val
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<211> 2459

<212> DNA

<213> Homo sapiens

<400> 2851

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<211> 317

<212> PRT

<213> Homo sapiens

<400> 2852

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<212> DNA

<213> Homo sapiens

<400> 2853

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<213> Homo sapiens

<400> 2854

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2091

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 1205 1210 1215
 Thr Leu Ala Gly Arg Arg Ser Arg Thr Arg Gln Ser Arg Ala Leu Pro
 1220 1225 1230
 Pro Trp Arg
 1235

<210> 2855
 <211> 1676
 <212> DNA
 <213> Homo sapiens

<400> 2855
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 60
 agtggcagcc ccgagggagc tagaatgacc acagttcaga ccatcacagg cagtgatccc
 120
 gaggaagcca tctttgacac cctttgcacc gatgacagct ctgaagaggc aaagacactc
 180
 acaatggaca tattgacatt ggctcacacc tccacagaag ctaagggcct gtcctcagag
 240
 agcagcgctt cttccgacgg ccccatcca gtcacacccc cgtcacgggc ctcagagagc
 300
 agcgctctt ccgacggccc ccatccagtc atcacccgt caggggcctc agagagcagc
 360
 gcctcttccg acggccccca tccagtcac accccgtcat ggtccccggg atctgatgtc
 420
 actctctcgt ctgaagccct ggtgactgtc aaaaacatcg aggttattaa ttgcagcatc
 480
 acagaaatag aaacaacgac ttccagcatc cctggggcct cagacacaga tctcatcccc
 540
 acggaagggg tgaaggcctc gtccacctcc gatccaccag ctctgcctga ctccnactg
 600
 aagcaaaacc acacatcact gaggtcanca gcctctgccg agaccctgtc cacagccggc
 660
 accacagagt cagctgcacc tgatgccacg gttgggaccc cactccccac taacagcacc
 720
 atagaaagag aagtgcagc acccagggcc acgaccctca gtggagctct ggtcacagtt
 780
 agcaggaatc ccctggaaga aacctcagcc ctctctgttg agacaccaag ttacgtcaaa
 840
 gtccaggag cagctccggt ctccatagag gctgggtcag cagtgggcaa aacaacttcc
 900

ttgtctggga gctctgcttc ctctacagc ccctcggaag cgcacctcaa gaacttcacc
 960
 ccttcagaga caccgaccat ggacatcgca accaaggggc ccttccccac cagcagggac
 1020
 cctcttcctt ctgtccctcc gactacaacc aacagcagcc gagggacgaa cagcacctta
 1080
 gccaagatca caacctcagc gaagaccacg atgaagcccc caacagccac gcccacgact
 1140
 gctcggacga ggccgaccac agacgtgagt gcaggtgaaa atggagggtc ctctcctgc
 1200
 ggctgagtgt ggcttccccg gaagacctca ctgacccag agtggcagaa aggctgatgc
 1260
 agcagctcca ccgggaactc cagccccag cgcctcactt ccaggtctcc ttactgctg
 1320
 tcaggagagg ctaacggaca tcagctgcag ccagggcatgt cccgtatgcc aaaagagggt
 1380
 gctgccctta gcctgggccc ccaccgacag actgcagctg cgttactgtg ctgagaggta
 1440
 cccagaaggt tcccatgaag ggcagcatgt ccaagcccct gaccccagat gtggcaacag
 1500
 gaccctcgct cacatccacc ggagtgtatg tgtggggagg ggcttcacct gttcccagag
 1560
 gtgtccttgg actcaccttg gcacatgttc tgtgtttcag taaagagaga cctgatcacc
 1620
 catctgtgtg cttccatcct gcattaaaat tcactcagtg tggcccagaa aaaaaa
 1676

<210> 2856

<211> 401

<212> PRT

<213> Homo sapiens

<400> 2856

Leu Thr Thr Ser Pro Asn Phe Met Val Leu Ile Ala Thr Ser Val Glu
 1 5 10 15
 Thr Ser Ala Ala Ser Gly Ser Pro Glu Gly Ala Arg Met Thr Thr Val
 20 25 30
 Gln Thr Ile Thr Gly Ser Asp Pro Glu Glu Ala Ile Phe Asp Thr Leu
 35 40 45
 Cys Thr Asp Asp Ser Ser Glu Glu Ala Lys Thr Leu Thr Met Asp Ile
 50 55 60
 Leu Thr Leu Ala His Thr Ser Thr Glu Ala Lys Gly Leu Ser Ser Glu
 65 70 75 80
 Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr Pro Ser Arg
 85 90 95
 Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro Val Ile Thr
 100 105 110
 Pro Ser Arg Ala Ser Glu Ser Ser Ala Ser Ser Asp Gly Pro His Pro
 115 120 125
 Val Ile Thr Pro Ser Trp Ser Pro Gly Ser Asp Val Thr Leu Leu Ala
 130 135 140
 Glu Ala Leu Val Thr Val Thr Asn Ile Glu Val Ile Asn Cys Ser Ile
 145 150 155 160
 Thr Glu Ile Glu Thr Thr Thr Ser Ser Ile Pro Gly Ala Ser Asp Thr

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      165      170      175
Asp Leu Ile Pro Thr Glu Gly Val Lys Ala Ser Ser Thr Ser Asp Pro
      180      185      190
Pro Ala Leu Pro Asp Ser Xaa Leu Lys Gln Asn His Thr Ser Leu Arg
      195      200      205
Ser Xaa Ala Ser Ala Glu Thr Leu Ser Thr Ala Gly Thr Thr Glu Ser
      210      215      220
Ala Ala Pro Asp Ala Thr Val Gly Thr Pro Leu Pro Thr Asn Ser Thr
      225      230      235      240
Ile Glu Arg Glu Val Thr Ala Pro Arg Ala Thr Thr Leu Ser Gly Ala
      245      250      255
Leu Val Thr Val Ser Arg Asn Pro Leu Glu Glu Thr Ser Ala Leu Ser
      260      265      270
Val Glu Thr Pro Ser Tyr Val Lys Val Ser Gly Ala Ala Pro Val Ser
      275      280      285
Ile Glu Ala Gly Ser Ala Val Gly Lys Thr Thr Ser Phe Ala Gly Ser
      290      295      300
Ser Ala Ser Ser Tyr Ser Pro Ser Glu Ala Ala Leu Lys Asn Phe Thr
      305      310      315      320
Pro Ser Glu Thr Pro Thr Met Asp Ile Ala Thr Lys Gly Pro Phe Pro
      325      330      335
Thr Ser Arg Asp Pro Leu Pro Ser Val Pro Pro Thr Thr Thr Asn Ser
      340      345      350
Ser Arg Gly Thr Asn Ser Thr Leu Ala Lys Ile Thr Thr Ser Ala Lys
      355      360      365
Thr Thr Met Lys Pro Pro Thr Ala Thr Pro Thr Thr Ala Arg Thr Arg
      370      375      380
Pro Thr Thr Asp Val Ser Ala Gly Glu Asn Gly Gly Ser Ser Ser Cys
      385      390      395      400
Gly

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<210> 2857

<211> 1668

<212> DNA

<213> Homo sapiens

<400> 2857

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ctgggttgga gttggtaggg tcgcaccggg acagcccgga agagttcggt tggggctggg
60

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ggctgggcgg gaggaggtga ctcggtttc tgtgtaaact tggccgcggt tgccgcagga
120

```

```

aggctagcca gagggtaatt acacaggtgt aggcggcggg ggcgggcgga gggctcggga
180

```

```

ggcgcagggg actggaagag ttggctgcgc ccaggcacca ggtggaagaa tttcataacc
240

```

```

agccctgcgg aggtgcctct gttccagag gcgtttttgt acgaaggga tttgaaagc
300

```

```

gaagcagaag ccgtagaatc agcggcgagc ctggtgaaag aaccacagg tgcatttcac
360

```

```

agcactctgg gcgaaaattg gatgtgaaaa tgaagccaga ccgagatact ctggatgaat
420

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attttgaata tgatgcagag gagttcttgg tctctttggc cttgctgata acagaaggac
480

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gaacacctga atgttctgta aaaggctgaa cagaaagctt tcattgccct ccagcacagt
 540
 cttgttacct agtaactacc aaacatgaat gtagtgacaa gctggcccag tgccgccaag
 600
 ccagacgaac taggtctgag gtcacattgt tgtggaagaa taaccttcca atcatggtgg
 660
 aaatgatgct actaccagac tgctgtctaca gcatgatgg gccaccaca gaggggaattg
 720
 atctaaatga tcttgcgatt aagcaagatg cattattatt agaaagatgg atcttgagc
 780
 cagttcctcg acagaatggg gaccgattta ttgaagagaa gacgcttctg ttggctgtcc
 840
 gctcatttgt gtttttttct cagttaagtg catggctgag tgtttctcat ggtgctatc
 900
 cactgaaatat tctctacaga atcagtgtcg ctgatgtaga cctacagtgg aatttttcac
 960
 agactccaat tgagcatgtg tttctgttcc ccaatgttcc tcacaatgtt gccttgaaag
 1020
 tcagtgggtca atccctggcc caaacaatct aattatccag ttttgacgtg cagtattcac
 1080
 actaatattg gccttttatga gaaaagaatt caacaacata aacttaaaac tcatcagcac
 1140
 cataacccaa atgaagcaga acaatgtggg acaaacagtt cacagcgtct gtgtagcaaa
 1200
 caaacttgga ccattggcacc tgaaagtgtg ttacatgcaa aaagtggccc aagtcagaa
 1260
 tatactgcag ctgtcaaaaa tatcaaaacta tatccaggca ctggcagtaa atctgaccat
 1320
 gggacatctc aagccaatat tctaggcttt agtgggtatag gtgatataaa atcacaagaa
 1380
 acatcagtga gaactttaaa atcattttca atggttgatt ccagtatctc taaccgccag
 1440
 agtttctggc agtcagctgg tgagactaac cctttaatag gctctttaat tcaggagcgg
 1500
 caagaaatca ttgcaagaat tgctcaacat ttgattcatt gtgatccaag cacttcacat
 1560
 gtttctggac gtccatttaa tactcaagag tctagttcac tccattcaaa acttttccgg
 1620
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 1668

<210> 2858

<211> 220

<212> PRT

<213> Homo sapiens

<400> 2858

Met	Lys	Pro	Asp	Arg	Asp	Thr	Leu	Asp	Glu	Tyr	Phe	Glu	Tyr	Asp	Ala
1				5					10					15	
Glu	Glu	Phe	Leu	Val	Ser	Leu	Ala	Leu	Leu	Ile	Thr	Glu	Gly	Arg	Thr
			20					25					30		
Pro	Glu	Cys	Ser	Val	Lys	Gly	Arg	Thr	Glu	Ser	Phe	His	Cys	Pro	Pro
		35				40					45				
Ala	Gln	Ser	Cys	Tyr	Pro	Val	Thr	Thr	Lys	His	Glu	Cys	Ser	Asp	Lys

```

      50              55              60
Leu Ala Gln Cys Arg Gln Ala Arg Arg Thr Arg Ser Glu Val Thr Leu
65              70              75              80
Leu Trp Lys Asn Asn Leu Pro Ile Met Val Glu Met Met Leu Leu Pro
      85              90              95
Asp Cys Cys Tyr Ser Asp Asp Gly Pro Thr Thr Glu Gly Ile Asp Leu
      100             105             110
Asn Asp Pro Ala Ile Lys Gln Asp Ala Leu Leu Leu Glu Arg Trp Ile
      115             120             125
Leu Glu Pro Val Pro Arg Gln Asn Gly Asp Arg Phe Ile Glu Glu Lys
      130             135             140
Thr Leu Leu Leu Ala Val Arg Ser Phe Val Phe Phe Ser Gln Leu Ser
145             150             155             160
Ala Trp Leu Ser Val Ser His Gly Ala Ile Pro Arg Asn Ile Leu Tyr
      165             170             175
Arg Ile Ser Ala Ala Asp Val Asp Leu Gln Trp Asn Phe Ser Gln Thr
      180             185             190
Pro Ile Glu His Val Phe Pro Val Pro Asn Val Ser His Asn Val Ala
      195             200             205
Leu Lys Val Ser Gly Gln Ser Leu Ala Gln Thr Ile
      210             215             220

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<210> 2859

<211> 1029

<212> DNA

<213> Homo sapiens

<400> 2859

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ntgcagaagg aaattgcact cgtctctctcc ggcgcgccgg gaccacaacac aatgcaccag
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ccgcctgagt ccaccgccgc ggccgccgcc gctgcagaca ttagcgctag gaagatggcg
120
caccgcggcaa tgttccctcg aaggggcagc ggtagtgcca gcgcctctgc tctcaatgca
180
gcaggtaccg gcgtcggtag taatgccaca tcttccgagg attttccgcc tccgtcgtcg
240
cttcagccgc cgcgccctgc agcatcttct acgtcgggac cacagcctcc gcctccacaa
300
agcctgaacc tcctttcgca ggctcagctg caggcacagc ctcttcgcc aggcggaact
360
caaatgaaaa agaaaagtgg cttccagata actagcgta ctctgctca gatctccgct
420
agtatcagct ctaacaacag tatagcagag gacactgaga gctatgatga tctggatgaa
480
tctcacacgg aagatctctc ttcttcggag atccttgatg tgctactttc cagggtact
540
gacttagggg agcccgaacg cagctctca gaagagacc taaataactt ccaggaagcc
600
gagacacctg gggcagcttc tccaaccag cccaccttc ctcagcctca tttgcctcac
660
cttcacacac agaattgtgt gatcaatggg aatgctcacc cacaccacct ccatcaccac
720
catcagattc atcatgggca ccacctcaa catggtcacc accatccacc tcatgttgct
780

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gtggccagtg catccattac tgggtgggcca cctcaagcc cagtatctag aaaactctct
 840
 acaactggaa gctctgacag tatcacacca gttgcaccaa cttctgctgt atcatccagt
 900
 gggtccacctg catctgtaat gactaatatg cgtgctccaa gtactacagg tggaataggt
 960
 ataaattctg ttactggcac tagtacagta aataatgtta acattactgc tgtgggtagt
 1020
 ttttaattcc
 1029

<210> 2860

<211> 343

<212> PRT

<213> Homo sapiens

<400> 2860

Xaa	Gln	Lys	Glu	Ile	Ala	Leu	Val	Ser	Ser	Ala	Pro	Pro	Gly	Pro	Asn
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Thr	Met	His	Gln	Pro	Pro	Glu	Ser	Thr	Ala	Ala	Ala	Ala	Ala	Ala	Ala
			20					25					30		
Asp	Ile	Ser	Ala	Arg	Lys	Met	Ala	His	Pro	Ala	Met	Phe	Pro	Arg	Arg
		35					40					45			
Gly	Ser	Gly	Ser	Gly	Ser	Ala	Ser	Ala	Leu	Asn	Ala	Ala	Gly	Thr	Gly
	50					55				60					
Val	Gly	Ser	Asn	Ala	Thr	Ser	Ser	Glu	Asp	Phe	Pro	Pro	Pro	Ser	Leu
65					70				75					80	
Leu	Gln	Pro	Pro	Pro	Pro	Ala	Ala	Ser	Ser	Thr	Ser	Gly	Pro	Gln	Pro
			85					90					95		
Pro	Pro	Pro	Gln	Ser	Leu	Asn	Leu	Leu	Ser	Gln	Ala	Gln	Leu	Gln	Ala
			100					105					110		
Gln	Pro	Leu	Ala	Pro	Gly	Gly	Thr	Gln	Met	Lys	Lys	Lys	Ser	Gly	Phe
			115				120					125			
Gln	Ile	Thr	Ser	Val	Thr	Pro	Ala	Gln	Ile	Ser	Ala	Ser	Ile	Ser	Ser
	130					135				140					
Asn	Asn	Ser	Ile	Ala	Glu	Asp	Thr	Glu	Ser	Tyr	Asp	Asp	Leu	Asp	Glu
145				150					155				160		
Ser	His	Thr	Glu	Asp	Leu	Ser	Ser	Ser	Glu	Ile	Leu	Asp	Val	Ser	Leu
			165					170					175		
Ser	Arg	Ala	Thr	Asp	Leu	Gly	Glu	Pro	Glu	Arg	Ser	Ser	Ser	Glu	Glu
			180				185						190		
Thr	Leu	Asn	Asn	Phe	Gln	Glu	Ala	Glu	Thr	Pro	Gly	Ala	Val	Ser	Pro
		195				200					205				
Asn	Gln	Pro	His	Leu	Pro	Gln	Pro	His	Leu	Pro	His	Leu	Pro	Gln	Gln
	210					215				220					
Asn	Val	Val	Ile	Asn	Gly	Asn	Ala	His	Pro	His	His	Leu	His	His	His
225				230					235					240	
His	Gln	Ile	His	His	Gly	His	His	Leu	Gln	His	Gly	His	His	His	Pro
			245					250					255		
Ser	His	Val	Ala	Val	Ala	Ser	Ala	Ser	Ile	Thr	Gly	Gly	Pro	Pro	Ser
			260				265						270		
Ser	Pro	Val	Ser	Arg	Lys	Leu	Ser	Thr	Thr	Gly	Ser	Ser	Asp	Ser	Ile
	275					280						285			
Thr	Pro	Val	Ala	Pro	Thr	Ser	Ala	Val	Ser	Ser	Ser	Gly	Ser	Pro	Ala

```

      290              295              300
Ser Val Met Thr Asn Met Arg Ala Pro Ser Thr Thr Gly Gly Ile Gly
305              310              315              320
Ile Asn Ser Val Thr Gly Thr Ser Thr Val Asn Asn Val Asn Ile Thr
      325              330              335
Ala Val Gly Ser Phe Asn Ser
      340

```

<210> 2861
 <211> 756
 <212> DNA
 <213> Homo sapiens

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<400> 2861
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60
gacctttctt tccattcacc ttcactggat cttgtttctg aagcttttagc ggttatcaac
120
aatgggaaca agggccctcc agttggctca aggataagca tgccaaccac aaagcctcgt
180
ccaggactga gagaagaaaa attagcaagt atcatgagta agctgccact agctactccc
240
aaaaaactag attctactca gactacacat tcttcaagtc ttattgctgg tcacacaggg
300
ccagtaccaa agaaacccca ggatttagct catactggca tctcttcagg ctttattgct
360
ggttcttcca ttcagaaccc taaagtttct ttagaacctt tgccagccag gctacttcaa
420
caaggacttc agaggtaag ccagattcac acttcttctt cttcacagac ccatgtctcc
480
tcttcttccc aagoccaaat tgctgectct tctcatgctc tgggaacatc cgaggcccaa
540
gatgcttctt cgtaaacaca agtaacaaag gtgcaccagc attcagctgt ccagcagaac
600
tatgtgtctc cattacaggc caccatcagt aaatcccaga ccaaccccg tgaagtta
660
agtaataatc ccaactctc ctgttctctc tcacttatta agacttcaga taagccactt
720
atgtaccgcc ttcccttate taccctctc acgcgt
756

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<210> 2862
 <211> 252
 <212> PRT
 <213> Homo sapiens

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<400> 2862
Ala Ser Ser Ser Ser Ala Pro Ala Gln Glu Thr Ile Cys Leu Asp Asp
1      5      10      15
Ser Leu Asp Glu Asp Leu Ser Phe His Ser Pro Ser Leu Asp Leu Val
20      25      30
Ser Glu Ala Leu Ala Val Ile Asn Asn Gly Asn Lys Gly Pro Pro Val
35      40      45
Gly Ser Arg Ile Ser Met Pro Thr Thr Lys Pro Arg Pro Gly Leu Arg

```


50		55		60
Glu Glu Lys Leu Ala Ser Ile Met Ser Lys Leu Pro Leu Ala Thr Pro				
65		70		75
Lys Lys Leu Asp Ser Thr Gln Thr Thr His Ser Ser Ser Leu Ile Ala				80
	85		90	95
Gly His Thr Gly Pro Val Pro Lys Lys Pro Gln Asp Leu Ala His Thr				
	100		105	110
Gly Ile Ser Ser Gly Leu Ile Ala Gly Ser Ser Ile Gln Asn Pro Lys				
	115		120	125
Val Ser Leu Glu Pro Leu Pro Ala Arg Leu Leu Gln Gln Gly Leu Gln				
	130		135	140
Arg Ser Ser Gln Ile His Thr Ser Ser Ser Ser Gln Thr His Val Ser				
	145		150	155
Ser Ser Ser Gln Ala Gln Ile Ala Ala Ser Ser His Ala Leu Gly Thr				
	165		170	175
Ser Glu Ala Gln Asp Ala Ser Ser Leu Thr Gln Val Thr Lys Val His				
	180		185	190
Gln His Ser Ala Val Gln Gln Asn Tyr Val Ser Pro Leu Gln Ala Thr				
	195		200	205
Ile Ser Lys Ser Gln Thr Asn Pro Val Val Lys Leu Ser Asn Asn Pro				
	210		215	220
Gln Leu Ser Cys Ser Ser Ser Leu Ile Lys Thr Ser Asp Lys Pro Leu				
	225		230	235
Met Tyr Arg Leu Pro Leu Ser Thr Pro Phe Thr Arg				
	245		250	

<210> 2863

<211> 711

<212> DNA

<213> Homo sapiens

<400> 2863

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naccgacgtc gaatatccat gcagcgcgct ccgggagctg cacgngctg cgtggaaaga
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120
gccgtgcccc gaatcccagt cagaagttcc agcctgccac tgttctctga tgccatgcca
180
gcaccaactc aactgttttt tcctctcatt cgtaactgtg aactgagcag gatctatggc
240
actgcatgtt actgccacca caaacatctc tgttggttct catcgtagat tcctcagagt
300
cgactgagat acacacctca tccagcatat gctacctttt gcaggccaaa ggagaactgg
360
tggcagtaca cccaaggaag gagatatgct tccacaccac agaaatttta cctcacacct
420
ccacaagtca atagcatcct taaagcta atgaataggt tcaaagtgcc agaatttgac
480
ggcaaaaatg tcagtcttat ccttggtatt gacagcaatc agctgcctgc aaatgcaccc
540
attgaggacc ggagaagtgc agcaacctgc ttgcagacca gagggatgct tttgggggtt
600
tttgatggcc atgcagggtg tgcttggttc caggcagtca gtgaaagact cttttattat
660

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attgctgtct ctttgttacc ccatgagact ttgctagaga ttgaaaatgc a
711

<210> 2864

<211> 237

<212> PRT

<213> Homo sapiens

<400> 2864

Xaa Arg Arg Arg Ile Ser Met Gln Arg Ala Pro Gly Ala Ala Arg Xaa
1 5 10 15
Cys Val Glu Arg Ala Pro Ser Gly Gly Val Val Val Ala Pro Ser Ser
20 25 30
Ser Gly Arg Ile Val Trp Ser Pro Ala Val Pro Gly Ile Pro Val Arg
35 40 45
Ser Ser Ser Leu Pro Leu Phe Ser Asp Ala Met Pro Ala Pro Thr Gln
50 55 60
Leu Phe Phe Pro Leu Ile Arg Asn Cys Glu Leu Ser Arg Ile Tyr Gly
65 70 75 80
Thr Ala Cys Tyr Cys His His Lys His Leu Cys Cys Ser Ser Ser Tyr
85 90 95
Ile Pro Gln Ser Arg Leu Arg Tyr Thr Pro His Pro Ala Tyr Ala Thr
100 105 110
Phe Cys Arg Pro Lys Glu Asn Trp Trp Gln Tyr Thr Gln Gly Arg Arg
115 120 125
Tyr Ala Ser Thr Pro Gln Lys Phe Tyr Leu Thr Pro Pro Gln Val Asn
130 135 140
Ser Ile Leu Lys Ala Asn Glu Tyr Ser Phe Lys Val Pro Glu Phe Asp
145 150 155 160
Gly Lys Asn Val Ser Ser Ile Leu Gly Phe Asp Ser Asn Gln Leu Pro
165 170 175
Ala Asn Ala Pro Ile Glu Asp Arg Arg Ser Ala Ala Thr Cys Leu Gln
180 185 190
Thr Arg Gly Met Leu Leu Gly Val Phe Asp Gly His Ala Gly Cys Ala
195 200 205
Cys Ser Gln Ala Val Ser Glu Arg Leu Phe Tyr Tyr Ile Ala Val Ser
210 215 220
Leu Leu Pro His Glu Thr Leu Leu Glu Ile Glu Asn Ala
225 230 235

<210> 2865

<211> 585

<212> DNA

<213> Homo sapiens

<400> 2865

nggatccttc caaggtatcc aggtaccgc cacagtttgg aatagagatg ttaggagaga
60
agaagtagta gaagacaaag acagttcttt aaattcttga gaagtatgag ctctgtgtat
120
ctgcagtgtgta aagttttgat atgtgatagc agtgaccacc agtctcgtg caatcaaggt
180
tgtgtctcca gaagcaaagc agacatttct tcatataaat ggaaaacaga ttccatcata
240

ggacccattc gtctgaaaag ggatcgaagt gcaagtggca attcaggatt tcagcatgaa
 300
 acacatgcgg aagaaactcc aaaccagcct ttcaacagtg tgcattctgtt ttccttcatg
 360
 gttctagctc tgaatgtggt gactgtagcg acaatcacag tgaggcattt tgtaaatcaa
 420
 cgggcagact acaaatacca gaagctgcag aactattaac taacagggtcc aaccctaagt
 480
 gagacatggt tctccaggat gccaaaggaa atgctacctc gtggctacac atattatgaa
 540
 taaatgagga agggcctgaa agtggcacac aggcctgcaa aaaaa
 585

<210> 2866
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 2866
 Glu Arg Arg Ser Ser Arg Arg Gln Arg Gln Phe Phe Lys Phe Leu Arg
 1 5 10 15
 Ser Met Ser Ser Val Tyr Leu Gln Cys Lys Val Leu Ile Cys Asp Ser
 20 25 30
 Ser Asp His Gln Ser Arg Cys Asn Gln Gly Cys Val Ser Arg Ser Lys
 35 40 45
 Arg Asp Ile Ser Ser Tyr Lys Trp Lys Thr Asp Ser Ile Ile Gly Pro
 50 55 60
 Ile Arg Leu Lys Arg Asp Arg Ser Ala Ser Gly Asn Ser Gly Phe Gln
 65 70 75 80
 His Glu Thr His Ala Glu Glu Thr Pro Asn Gln Pro Phe Asn Ser Val
 85 90 95
 His Leu Phe Ser Phe Met Val Leu Ala Leu Asn Val Val Thr Val Ala
 100 105 110
 Thr Ile Thr Val Arg His Phe Val Asn Gln Arg Ala Asp Tyr Lys Tyr
 115 120 125
 Gln Lys Leu Gln Asn Tyr
 130

<210> 2867
 <211> 444
 <212> DNA
 <213> Homo sapiens

<400> 2867
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 60
 ctgtcggccg ccgccatcaa gaggatcgtg gctacagcta aggccagtgg gaagaagctg
 120
 cagaaggtga ctctgaaggt gtcgccacgg ggaattatcc ttcatccagg ccatcatcca
 180
 gctcccagac aacctgctg ccactcaagg cttgtggccg cggcacctcg tccatgttgg
 240
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<210> 2868
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<400> 2868
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<211> 258

<212> PRT

<213> Homo sapiens

<400> 2870

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		130				135					140			Asp
Gln	Pro	His	Pro	Ser	Ile	Gln	Gln	Gly	Leu	His	Val	Pro	His	Pro
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			180					185					190	His
Pro	His	Ser	Asp	Leu	Thr	Phe	Asn	Pro	Ser	Ser	Ala	Leu	Glu	Gly
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<210> 2871

<211> 786

<212> DNA

<213> Homo sapiens

<400> 2871

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<211> 153

<212> PRT

<213> Homo sapiens

<400> 2872

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			20					25					30		
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Gln	His	Thr	Ser	Arg	Val	Leu	Gly	Ile	Glu	Leu	Leu	Glu	Gln	Ala	Val
				85				90						95	
Glu	Asp	Ala	Arg	Trp	Thr	Ala	Ala	Phe	Asn	Gly	Ile	Thr	Asn	Ser	Glu
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Phe	His	Thr	Gly	Gln	Ala	Glu	Lys	Ile	Leu	Pro	Gly	Leu	Leu	Lys	Ser
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<210> 2874
 <211> 248
 <212> PRT

<213> Homo sapiens

<400> 2874

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 Pro Gly Leu Leu Ile Ala Phe Ser Ala Cys Thr Thr Val Leu Val Ala
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 Gly His Leu Phe Ala Leu Met Ile Ser Thr Cys Ile Leu Pro Asn Ile
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 Glu Ala Val Ser Asn Cys Thr Ile Ser Thr Arg Lys Glu Ser Pro His
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 Glu Arg Met His Arg His Ile Glu Leu Ala Trp Ala Phe Ser Thr Val
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 Lys Pro Pro Ala Ser Gly Ala Ala Ala Asn Val Ser Thr Ser Gly Ile
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 Thr Pro Gly Gln Ala Ala Ala Ile Ala Ser Thr Thr Ile Met Val Pro
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<210> 2875

<211> 593

<212> DNA

<213> Homo sapiens

<400> 2875

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 <211> 193
 <212> PRT
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<400> 2876
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 Phe Ser Tyr Lys Asp Glu Glu Asn Gly Asn Arg Gly Gly Lys Gln Arg
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 <211> 1921
 <212> DNA
 <213> Homo sapiens

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1680
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1740
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<210> 2878
 <211> 451
 <212> PRT
 <213> Homo sapiens

<400> 2878
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 Thr Glu Glu Gly Lys Glu Val Trp Asp Tyr Val Thr Val Arg Lys Asp
 35 40 45
 Ala Tyr Met Phe Trp Trp Leu Tyr Tyr Ala Thr Thr Pro Ala Arg Thr
 50 55 60
 Ser Glu Leu Pro Leu Val Met Trp Leu Gln Gly Gly Pro Gly Gly Ser
 65 70 75 80
 Ser Thr Gly Phe Gly Asn Phe Glu Glu Ile Gly Pro Leu Asp Ser Asp
 85 90 95
 Leu Lys Pro Arg Lys Thr Thr Trp Leu Gln Ala Ala Ser Leu Leu Phe
 100 105 110
 Val Asp Asn Pro Val Gly Thr Gly Phe Ser Tyr Val Asn Gly Ser Gly
 115 120 125
 Ala Tyr Ala Lys Asp Leu Ala Met Val Ala Ser Asp Met Met Val Leu
 130 135 140
 Leu Lys Thr Phe Phe Ser Cys His Lys Glu Phe Gln Thr Val Pro Phe
 145 150 155 160
 Tyr Ile Phe Ser Glu Ser Tyr Gly Gly Lys Met Ala Ala Gly Ile Gly
 165 170 175
 Leu Glu Leu Tyr Lys Ala Ile Gln Arg Gly Thr Ile Lys Cys Asn Phe
 180 185 190
 Ala Gly Val Ala Leu Gly Asp Ser Trp Ile Ser Pro Val Asp Ser Val
 195 200 205
 Leu Ser Trp Gly Pro Tyr Leu Tyr Ser Met Ser Leu Leu Glu Asp Lys
 210 215 220
 Gly Leu Ala Glu Val Ser Lys Val Ala Glu Gln Val Leu Asn Ala Val
 225 230 235 240
 Asn Lys Gly Leu Tyr Arg Glu Ala Thr Glu Leu Trp Gly Lys Ala Glu
 245 250 255
 Met Ile Ile Glu Gln Asn Thr Asp Gly Val Asn Phe Tyr Asn Ile Leu
 260 265 270
 Thr Lys Ser Thr Pro Thr Ser Thr Met Glu Ser Ser Leu Glu Phe Thr
 275 280 285
 Gln Ser His Leu Val Cys Leu Cys Gln Arg His Val Arg His Leu Gln
 290 295 300
 Arg Asp Ala Leu Ser Gln Leu Met Asn Gly Pro Ile Arg Lys Lys Leu
 305 310 315 320
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<210> 2879
<211> 1352
<212> DNA
<213> Homo sapiens
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240
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300
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480
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720
aagccgggga ggtggtgtgc cgtgcacgtg cagatcgctt ggcagatcta ccgtcaccag
780
cagaagataa aggagatgca gctggacccc cacaagctgg aggtgggtgc aaagctggac
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900

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 1260
 gagccggtca atggcaagga ggagcaggaa cgggacctcc tggagaagac gcgcctgctg
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<210> 2880

<211> 376

<212> PRT

<213> Homo sapiens

<400> 2880

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			20					25					30		
Leu	Ile	Gln	Pro	Ala	Asn	His	Val	Leu	Pro	Ala	Ser	Phe	Gly	Asn	Ser
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Asp	Trp	Tyr	Leu	Val	Thr	Gly	Ser	Ser	Leu	Thr	Cys	Thr	Pro	Gly	Pro
	50					55					60				
Ala	Arg	Gly	Glu	Arg	Pro	Pro	Arg	Leu	Gly	Leu	Pro	Thr	Pro	Gly	Val
65					70				75					80	
Pro	Val	Xaa	Asp	Lys	Tyr	Ala	Pro	Lys	Leu	Asp	Ser	Pro	Tyr	Phe	Arg
			85					90						95	
His	Ser	Ser	Val	Ser	Phe	Phe	Pro	Ser	Phe	Pro	Pro	Ala	Ile	Pro	Gly
			100					105					110		
Leu	Pro	Thr	Leu	Leu	Pro	His	Pro	Gly	Pro	Phe	Gly	Ser	Leu	Gln	Gly
		115				120						125			
Ala	Phe	Gln	Pro	Lys	Thr	Ser	Ser	Pro	Ile	Glu	Val	Ala	Arg	Arg	Ala
	130					135					140				
Gly	Ala	Val	His	Thr	Leu	Leu	Gln	Lys	Ala	Pro	Gly	Val	Ser	Asp	Pro
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Tyr	Arg	Ala	Val	Val	Lys	Lys	Pro	Gly	Arg	Trp	Cys	Ala	Val	His	Val
			165					170						175	
Gln	Ile	Ala	Trp	Gln	Ile	Tyr	Arg	His	Gln	Gln	Lys	Ile	Lys	Glu	Met
		180						185					190		
Gln	Leu	Asp	Pro	His	Lys	Leu	Glu	Val	Gly	Ala	Lys	Leu	Asp	Leu	Phe
		195				200						205			
Gly	Arg	Pro	Pro	Ala	Pro	Gly	Val	Phe	Ala	Gly	Phe	His	Tyr	Pro	Gln
	210					215					220				
Asp	Leu	Ala	Arg	Pro	Leu	Phe	Pro	Ser	Thr	Gly	Ala	Ala	His	Pro	Ala
225					230					235				240	
Ser	Asn	Pro	Phe	Gly	Pro	Ser	Ala	His	Pro	Gly	Ser	Phe	Leu	Pro	Thr

245								250				255			
Gly	Pro	Leu	Thr	Asp	Pro	Phe	Ser	Arg	Pro	Ser	Thr	Phe	Gly	Gly	Leu
260								265				270			
Gly	Ser	Leu	Ser	Ser	His	Ala	Phe	Gly	Gly	Leu	Gly	Ser	His	Ala	Leu
275								280				285			
Ala	Pro	Gly	Gly	Ser	Ile	Phe	Ala	Pro	Lys	Glu	Gly	Ser	Ser	Val	Leu
290								295				300			
Gly	Leu	Pro	Ser	Pro	His	Glu	Ala	Trp	Ser	Arg	Leu	His	Arg	Ala	Pro
305								310				315			
Pro	Ser	Phe	Pro	Ala	Pro	Pro	Pro	Trp	Pro	Lys	Ser	Val	Asp	Ala	Glu
320								325				330			
Arg	Val	Ser	Ala	Leu	Thr	Asn	His	Asp	Arg	Glu	Pro	Val	Asn	Gly	Lys
335								340				345			
Glu	Glu	Gln	Glu	Arg	Asp	Leu	Leu	Glu	Lys	Thr	Arg	Leu	Leu	Ser	Arg
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<210> 2881
<211> 3021
<212> DNA
<213> Homo sapiens
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120
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240
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300
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360
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420
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480
cccctcctcc ccgaggctga ggcgtgtgtg cggcaacacc tccccgacct ctacgtgct
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900

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 2880
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<210> 2882
 <211> 96
 <212> PRT
 <213> Homo sapiens

<400> 2882
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 Val His Pro Gln His Phe Leu Arg Lys Arg Thr Pro Ala Gln Ala Gly
 35 40 45
 Pro Ala Ile Ser Pro Leu Pro Thr Asp Ser Gln Ser Pro Leu Ala Ser
 50 55 60
 Pro Leu Asp Val Ser Gly Gln Gly Ser Gly Gly Cys Ser Phe Asp Lys
 65 70 75 80
 Lys Lys Lys Lys Phe Tyr Val Phe Lys Leu Leu Leu Gln Asp Phe Asn
 85 90 95

<210> 2883
 <211> 516
 <212> DNA
 <213> Homo sapiens

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<210> 2884

<211> 172

<212> PRT

<213> Homo sapiens

<400> 2884

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Leu	Arg	Gly	Cys	Tyr	His	Glu	Gly	Pro	Ala	Gly	Gly	Ala	Ala	Ala	Ala
			20					25					30		
Pro	Ser	Ser	Val	Asp	Thr	Tyr	Pro	Tyr	Gly	Leu	Pro	Thr	Pro	Pro	Glu
		35				40					45				
Met	Ser	Pro	Leu	Asp	Val	Leu	Glu	Pro	Glu	Gln	Thr	Phe	Phe	Ser	Ser
	50				55				60						
Pro	Cys	Gln	Glu	Glu	His	Gly	His	Pro	Arg	Arg	Ile	Pro	His	Leu	Pro
65					70				75					80	
Gly	His	Pro	Tyr	Ser	Pro	Glu	Tyr	Ala	Pro	Ser	Pro	Leu	His	Cys	Ser
				85				90					95		
His	Pro	Leu	Gly	Ser	Leu	Ala	Leu	Gly	Gln	Ser	Pro	Gly	Val	Ser	Met
		100						105				110			
Met	Ser	Pro	Val	Pro	Gly	Cys	Pro	Pro	Ser	Pro	Ala	Tyr	Tyr	Ser	Pro
		115				120						125			
Ala	Thr	Tyr	His	Pro	Leu	His	Ser	Asn	Leu	Gln	Ala	His	Leu	Gly	Gln
		130				135					140				
Leu	Ser	Pro	Pro	Pro	Glu	His	Pro	Gly	Phe	Asp	Ala	Leu	Asp	Gln	Leu
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Asn	Gln	Gly	Glu	Leu	Leu	Gly	Asp	Met	Asp	Arg	Asn				
			165					170							

<210> 2885

<211> 807

<212> DNA

<213> Homo sapiens

<400> 2885

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 420
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 480
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 cttattcaga gtgctgccaa aagcactagc actcagggct tggagcatga cctggatgat
 600
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 660
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 807

<210> 2886

<211> 269

<212> PRT

<213> Homo sapiens

<400> 2886

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			20					25					30		
Gly	Arg	Asp	Ala	Glu	Thr	Leu	Gln	Lys	Gln	Lys	Glu	Thr	Ile	Lys	Ala
			35				40					45			
Phe	Leu	Lys	Lys	Leu	Glu	Ala	Leu	Ile	Ala	Ser	Asn	Asp	Asn	Ala	Asn
			50			55					60				
Lys	Thr	Cys	Lys	Met	Met	Leu	Ala	Thr	Glu	Glu	Thr	Ser	Pro	Asp	Leu
65					70				75						80
Val	Gly	Ile	Lys	Arg	Asp	Leu	Glu	Ala	Leu	Ser	Lys	Gln	Cys	Asn	Lys
			85					90						95	
Leu	Leu	Asp	Arg	Ala	Gln	Ala	Arg	Glu	Glu	Gln	Val	Glu	Gly	Thr	Ile
			100					105					110		
Lys	Arg	Leu	Glu	Glu	Phe	Tyr	Ser	Lys	Leu	Lys	Glu	Phe	Ser	Ile	Leu
			115				120					125			
Leu	Gln	Lys	Ala	Glu	Glu	His	Glu	Glu	Ser	Gln	Gly	Pro	Val	Gly	Met
			130			135					140				
Glu	Thr	Glu	Thr	Ile	Asn	Gln	Gln	Leu	Asn	Met	Phe	Lys	Val	Phe	Gln
145				150					155						160
Lys	Glu	Glu	Ile	Glu	Pro	Leu	Gln	Gly	Lys	Gln	Gln	Asp	Val	Asn	Trp
			165					170						175	
Leu	Gly	Gln	Gly	Leu	Ile	Gln	Ser	Ala	Ala	Lys	Ser	Thr	Ser	Thr	Gln
			180					185				190			
Gly	Leu	Glu	His	Asp	Leu	Asp	Asp	Val	Asn	Ala	Arg	Trp	Lys	Thr	Leu
			195			200					205				
Asn	Lys	Lys	Val	Ala	Gln	Arg	Ala	Ala	Gln	Leu	Gln	Glu	Ala	Leu	Leu
			210			215					220				
His	Cys	Gly	Arg	Phe	Gln	Asp	Ala	Leu	Glu	Ser	Leu	Leu	Ser	Trp	Met

225		230		235		240									
Val	Asp	Thr	Glu	Glu	Leu	Val	Ala	Asn	Gln	Lys	Pro	Pro	Ser	Ala	Glu
			245						250					255	
Phe	Lys	Val	Val	Lys	Asp	Lys	Ile	Gln	Glu	Gln	Lys	Leu			
			260						265						

<210> 2887

<211> 1945

<212> DNA

<213> Homo sapiens

<400> 2887

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1260

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 1920
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 1945

<210> 2888

<211> 315

<212> PRT

<213> Homo sapiens

<400> 2888

Met	Met	Lys	Pro	Ser	Trp	Leu	Ser	Arg	Thr	Glu	Phe	Ser	Lys	Arg	Leu
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Leu	Cys	Arg	Thr	Leu	Trp	Cys	Gln	Ser	Gly	Trp	Ser	Ser	Arg	Ser	Tyr
			20					25					30		
Thr	Arg	Ser	Met	Leu	Lys	Met	Thr	Thr	Ser	Ile	Asn	Arg	Arg	Ser	Arg
			35				40					45			
Thr	Ser	Thr	Lys	Ser	Thr	Arg	Thr	Ser	Ala	Arg	Pro	Gly	Leu	Thr	Ala
			50				55				60				
Thr	Val	Ser	Ile	Gly	Leu	Ser	Asp	Ser	Pro	Thr	Trp	Arg	His	Cys	Trp
65					70					75				80	
Met	Thr	Ala	Arg	Ser	Cys	Ser	Gly	Glu	Lys	Gly	Gly	His	Trp	Ala	Pro
				85					90					95	
Arg	Gln	Val	Gly	Val	Tyr	Leu	Leu	Pro	Gly	Arg	Val	Gly	Cys	Val	Ser
			100					105				110			
Ser	Arg	Val	Ser	Pro	Ser	Phe	Pro	Gly	Asp	Gly	Leu	Asp	Ser	Gly	Leu
			115				120					125			
Ala	Arg	Arg	Gly	Ser	Ala	Val	Ser	Ala	Leu	Ala	Ser	Gly	Leu	Val	Glu
			130				135					140			
Glu	Pro	Met	Leu	Gly	Pro	Pro	Phe	His	Pro	Thr	Pro	Arg	Phe	Lys	Ala
145					150					155				160	
Val	Ser	Ala	Lys	Ser	Lys	Glu	Asp	Leu	Val	Ser	Gln	Gly	Phe	Thr	Glu
				165					170					175	
Phe	Thr	Ile	Glu	Asp	Phe	His	Asn	Thr	Phe	Met	Asp	Leu	Ile	Glu	Gln

180					185					190						
Val	Glu	Lys	Gln	Thr	Ser	Val	Ala	Asp	Leu	Leu	Ala	Ser	Phe	Asn	Asp	
195					200					205						
Gln	Ser	Thr	Ser	Asp	Tyr	Leu	Val	Val	Tyr	Leu	Arg	Leu	Leu	Thr	Ser	
210					215					220						
Gly	Tyr	Leu	Gln	Arg	Glu	Ser	Lys	Phe	Phe	Glu	His	Phe	Ile	Glu	Gly	
225					230					235					240	
Gly	Arg	Thr	Val	Lys	Glu	Phe	Cys	Gln	Gln	Glu	Val	Glu	Pro	Met	Cys	
245					250					255						
Lys	Glu	Ser	Asp	His	Ile	His	Ile	Ile	Ala	Leu	Ala	Gln	Ala	Leu	Ser	
260					265					270						
Val	Ser	Ile	Gln	Val	Glu	Tyr	Met	Asp	Arg	Gly	Glu	Gly	Gly	Thr	Thr	
275					280					285						
Asn	Pro	His	Ile	Phe	Pro	Glu	Gly	Ser	Glu	Pro	Lys	Val	Tyr	Leu	Leu	
290					295					300						
Tyr	Arg	Pro	Gly	His	Tyr	Asp	Ile	Leu	Tyr	Lys						
305					310					315						

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<210> 2889
<211> 614
<212> DNA
<213> Homo sapiens
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<400> 2889
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120
ccggagggtgc agctaaaggc caccaaggca gaacaggcag aagggatgga atttggttc
180
aagatgcccc agatgaccat gcccaagcta gggagggcag agtccccatc acgtggcaag
240
ccaggcgagg cgggtgctga ggtctcaggg aagctggtaa cacttccttg tctgcagcca
300
gagggtgatg gtgaggctca tgtgggtgtc ccctctctca ctctgccttc agtggagcta
360
gacctgccag gaggacttgg cctgcagggg cagggtcccag ccgctaaaaa gggcaaggga
420
gagcgggcgg agggccccga ggtggcagca ggggtcaggg aagtgggctt ccgagtgcc
480
tctgttgaaa ttgtcaccac acagctgccc gccgtggaaa ttgaggaagg gcggctggag
540
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600
ggaccaaaag tggc
614

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<210> 2890
<211> 204
<212> PRT
<213> Homo sapiens
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<400> 2890
Val His Leu Pro Glu Val Gln Leu Pro Lys Val Ser Glu Ile Arg Leu


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Pro Glu Met Gln Val Xaa Glu Val Pro Asp Val His Leu Pro Lys Xaa
      20             25             30
Pro Glu Val Lys Leu Pro Arg Ala Pro Glu Val Gln Leu Lys Ala Thr
      35             40             45
Lys Ala Glu Gln Ala Glu Gly Met Glu Phe Gly Phe Lys Met Pro Lys
      50             55             60
Met Thr Met Pro Lys Leu Gly Arg Ala Glu Ser Pro Ser Arg Gly Lys
      65             70             75             80
Pro Gly Glu Ala Gly Ala Glu Val Ser Gly Lys Leu Val Thr Leu Pro
      85             90             95
Cys Leu Gln Pro Glu Val Asp Gly Glu Ala His Val Gly Val Pro Ser
      100            105            110
Leu Thr Leu Pro Ser Val Glu Leu Asp Leu Pro Gly Ala Leu Gly Leu
      115            120            125
Gln Gly Gln Val Pro Ala Ala Lys Met Gly Lys Gly Glu Arg Ala Glu
      130            135            140
Gly Pro Glu Val Ala Ala Gly Val Arg Glu Val Gly Phe Arg Val Pro
      145            150            155            160
Ser Val Glu Ile Val Thr Pro Gln Leu Pro Ala Val Glu Ile Glu Glu
      165            170            175
Gly Arg Leu Glu Met Ile Glu Thr Lys Val Lys Pro Ser Ser Lys Phe
      180            185            190
Ser Leu Pro Lys Phe Gly Leu Ser Gly Pro Lys Val
      195            200

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<210> 2891

<211> 565

<212> DNA

<213> Homo sapiens

<400> 2891

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120
ccaaccaacc aacaaaacta aaagtgtatc tgacacagtt caggtgataa gcaggaaaat
180
gggattatca gacaccggtt ctttggcaca cactgcgaag tcagcccttc tgcccagtct
240
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300
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420
tcttaacaac atggggacga ggtgggagca cctttccaaa gtggactgtg atttggcgcg
480
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565

```

<210> 2892

<211> 90
 <212> PRT
 <213> Homo sapiens

<400> 2892
 Met Leu Leu Arg Asp Gln Arg Ala Thr Ser Gln Trp Lys Ala Gly Gly
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 Arg Leu Cys Arg Ala Leu Ser Lys Thr Pro Leu Gln His Gln Leu His
 20 25 30
 Ser Thr Ser Tyr Arg Lys Ala Leu Pro Ile Leu Arg Pro Ser Ser Arg
 35 40 45
 Arg Glu Ala Gly Pro Leu His His Ile Asp Leu Arg Arg Cys Phe Ser
 50 55 60
 Arg Leu Gly Arg Gly Ala Asp Phe Ala Val Cys Ala Lys Glu Pro Val
 65 70 75 80
 Ser Asp Asn Pro Ile Phe Leu Leu Ile Thr
 85 90

<210> 2893
 <211> 2270
 <212> DNA
 <213> Homo sapiens

<400> 2893
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 120
 tcaattctgg cctgtgctct tctagggaga ctagatgtat gcaccaccca gaaactgcc
 180
 gtagggagca ccctacaggc atgacttggc agctaggcca tgtttatttc ccttggtggg
 240
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 300
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 480
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 720
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1020
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1140
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1200
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cggcccccca agcggaggag gcggaacccc tcagagtcag gctctgagcc ctcttcctca
1320
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1440
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1980
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2100
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2220
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2270

<210> 2894

<211> 490

<212> PRT

<213> Homo sapiens

<400> 2894

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			20					25					30		
Gln	Val	Ser	Val	Ser	Leu	His	Pro	Gly	Thr	Gly	Leu	Phe	Ser	Pro	Phe
		35					40					45			
Cys	Ser	Val	Pro	Leu	Trp	Cys	Ile	Tyr	Phe	Leu	Ser	Phe	Cys	Ile	Val
	50					55				60					
Leu	Ser	Leu	Pro	Ser	Ala	Ser	Leu	His	Leu	Cys	Leu	Ser	Cys	Leu	His
65					70					75				80	
Phe	Leu	Asn	Leu	Asp	Cys	Pro	Cys	Leu	Phe	Leu	Cys	His	Ser	Leu	Ser
			85						90					95	
Ser	Pro	Ser	Val	Cys	Gly	Ser	Ala	Ser	Leu	Ser	His	Ser	Pro	Tyr	Asn
			100					105					110		
Trp	Pro	Leu	Pro	Ala	Gln	Thr	Phe	Leu	Asp	Glu	Leu	His	Glu	Thr	Gly
	115						120					125			
Gln	Leu	His	Ser	Met	Ser	Thr	Trp	Met	Glu	Leu	Tyr	Pro	Ala	Val	Ser
	130					135					140				
Thr	Asp	Val	Arg	Phe	Ala	Asn	Met	Leu	Gly	Gln	Pro	Gly	Ser	Thr	Pro
145					150					155					160
Leu	Asp	Leu	Phe	Lys	Phe	Tyr	Val	Glu	Glu	Leu	Lys	Ala	Arg	Phe	His
			165						170					175	
Asp	Glu	Lys	Lys	Ile	Ile	Lys	Asp	Ile	Leu	Lys	Asp	Arg	Gly	Phe	Cys
		180						185					190		
Val	Glu	Val	Asn	Thr	Ala	Phe	Glu	Asp	Phe	Ala	His	Val	Ile	Ser	Phe
	195						200					205			
Asp	Lys	Arg	Ala	Ala	Ala	Leu	Asp	Ala	Gly	Asn	Ile	Lys	Leu	Thr	Phe
	210				215					220					
Asn	Ser	Leu	Leu	Glu	Lys	Ala	Glu	Ala	Arg	Glu	Arg	Glu	Arg	Glu	Lys
225				230					235					240	
Glu	Glu	Ala	Arg	Arg	Met	Arg	Arg	Arg	Glu	Ala	Ala	Phe	Arg	Ser	Met
			245					250						255	
Leu	Arg	Gln	Ala	Val	Pro	Ala	Leu	Glu	Leu	Gly	Thr	Ala	Trp	Glu	Glu
	260						265						270		
Val	Arg	Glu	Arg	Phe	Val	Cys	Asp	Ser	Ala	Phe	Glu	Gln	Ile	Thr	Leu
	275					280						285			
Glu	Ser	Glu	Arg	Ile	Arg	Leu	Phe	Arg	Glu	Phe	Leu	Gln	Val	Leu	Glu
	290				295					300					
Thr	Glu	Cys	Gln	His	Leu	His	Thr	Lys	Gly	Arg	Lys	His	Gly	Arg	Lys
305				310						315				320	
Gly	Lys	Lys	His	His	Lys	Arg	Ser	His	Ser	Pro	Ser	Gly	Ser	Glu	
			325					330					335		
Ser	Glu	Glu	Glu	Glu	Leu	Pro	Pro	Pro	Ser	Leu	Arg	Pro	Pro	Lys	Arg
	340						345						350		
Arg	Arg	Arg	Asn	Pro	Ser	Glu	Ser	Gly	Ser	Glu	Pro	Ser	Ser	Ser	Leu
	355					360						365			
Asp	Ser	Val	Glu	Ser	Gly	Gly	Ala	Leu	Gly	Gly	Arg	Gly	Ser	Pro	
	370				375					380					
Ser	Ser	His	Leu	Leu	Gly	Ala	Asp	His	Gly	Leu	Arg	Lys	Ala	Lys	Lys
385				390					395					400	
Pro	Lys	Lys	Lys	Thr	Lys	Lys	Arg	Arg	His	Lys	Ser	Asn	Ser	Pro	Glu
			405					410					415		
Ser	Glu	Thr	Asp	Pro	Glu	Glu	Lys	Ala	Gly	Lys	Glu	Ser	Asp	Glu	Lys
	420						425					430			
Glu	Gln	Glu	Gln	Asp	Lys	Asp	Arg	Glu	Leu	Gln	Gln	Ala	Glu	Leu	Pro

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          435          440          445
Asn Arg Ser Pro Gly Phe Gly Ile Lys Lys Glu Lys Thr Gly Trp Asp
  450          455          460
Thr Ser Glu Ser Glu Leu Ser Glu Gly Glu Leu Glu Arg Arg Arg Arg
465          470          475          480
Thr Leu Leu Gln Gln Leu Asp Asp His Gln
          485          490

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<210> 2895
 <211> 697
 <212> DNA
 <213> Homo sapiens

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<400> 2895
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120
tgcaggcggg agcacgtctc cagcatcaac ctgaagtccg ccacgaactc ggtgatgccc
180
ccgtactggc cgtggcgaa cttctcttcc atctgcagca gacacatgcc ctgtccgggc
240
tgctgcgagg aggcgcgacc gcccgcgccc ccgctgcgcg gcccttctgc cacctcctcc
300
tgccgcggtg gcaacgcccc ccaagggtg cagaaagggg gcggtgaggg cccggtgctt
360
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420
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480
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540
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600
ccggctccat cgtccccggc gtcccgggca cactcatgcc ccggcaggcc taggctgggc
660
ggtgtggaac agccgctcga ggtgctgggg gacgcgt
697

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<210> 2896
 <211> 174
 <212> PRT
 <213> Homo sapiens

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<400> 2896
Met Pro Pro Tyr Trp Pro Leu Ala Asn Phe Ser Ser Ile Cys Ser Arg
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His Met Pro Cys Pro Gly Cys Cys Gly Lys Ala Arg Pro Pro Arg Pro
          20          25          30
Pro Leu Arg Gly Pro Ser Ala Thr Ser Ser Cys Arg Gly Gly Asn Ala
          35          40          45
Pro Gln Gly Leu Gln Lys Gly Gly Glu Ala Pro Val Leu Leu Leu
          50          55          60
Gln Glu Leu Ala Gln Asp Ala Val Ala Pro Ala Val Ala Arg Arg Ser

```

```

65          70          75          80
Ala Pro Ala Pro Cys Ser Asn Arg Leu Arg Ser Pro Ser Pro Pro Ser
          85          90          95
Leu Pro Pro Asp Arg Pro Arg Pro Pro Ala Arg Arg His Ser Phe Arg
          100          105          110
Gly Pro Ala Leu Arg Ser Gly Pro Pro Leu Pro Pro Pro Pro Arg Arg
          115          120          125
Pro Leu Leu Arg Pro Pro Val Ala Ala Ala Leu Pro Pro Gln Pro Ala
          130          135          140
Pro Ser Leu Pro Ala Ser Arg Ala His Ser Cys Pro Gly Arg Pro Arg
145          150          155          160
Leu Gly Gly Val Glu Gln Pro Leu Glu Val Leu Gly Asp Ala
          165          170

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<210> 2897

<211> 3184

<212> DNA

<213> Homo sapiens

<400> 2897

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120
ctataattgt atgagaagaa taaaaacagt tcctttagaa ttcttattgt tttctctatt
180
ctttttcagg ctaagacaat gcatagcttt tgggtgatac aggtaaccct gggtaccact
240
aaagggtgat ccccttcaga taataaaccc atttaactcc agtctcactc ccttcaccag
300
gagggcagct cacagtcagc ttgggtggtga tgggggtttt gctgccagat gggtttcctt
360
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420
tgaaggctgg gttatccacg atgatggaga aggtcaccat gtgatagaag acattcttga
480
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540
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720
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<210> 2898

<211> 933

<212> PRT

<213> Homo sapiens

<400> 2898

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Thr	Phe	Ser	Phe	Gln	Ala	Gln	Leu	Cys	Gly	Ser	Lys	Thr	Leu	Leu	Gln
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Asp	Leu	Glu	Leu	Ile	Ile	Lys	Ile	Ser	His	Gly	Pro	Thr	Phe	Met	Cys
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Tyr	Lys	Gln	Thr	Leu	Val	Ile	Thr	Asn	Lys	Glu	Glu	Thr	Pro	Met	Ser
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Ile	Asp	Cys	Leu	Tyr	Thr	Asn	Thr	Thr	His	Leu	Glu	Val	Asn	Ser	Arg
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Val	Asp	Val	Val	Lys	Pro	Gly	Asn	Thr	Leu	Glu	Ile	Pro	Ile	Thr	Phe
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Tyr	Pro	Arg	Glu	Ser	Ile	Asn	Tyr	Gln	Glu	Leu	Ile	Pro	Phe	Glu	Ile
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Asn	Gly	Leu	Ser	Gln	Gln	Thr	Val	Glu	Ile	Lys	Gly	Lys	Gly	Thr	Glu

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Ala Val Leu Pro Gly	Gln Val Val Lys Arg Thr	Val Ser Ile Met Asn
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Asn Ser Leu Ala Gln	Leu Thr Phe Asn Gln Ser	Ile Leu Phe Thr Ile
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Pro Glu Leu Gln Glu	Pro Lys Val Leu Thr	Leu Ala Pro Phe His Asn
275	280	285
Ile Thr Leu Lys Pro	Lys Glu Val Cys Lys	Leu Glu Val Ile Phe Ala
290	295	300
Pro Lys Lys Arg Val	Pro Pro Phe Ser Glu	Glu Val Phe Met Glu Cys
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Met Gly Leu Leu Arg	Pro Leu Phe Leu Leu	Ser Gly Cys Cys Gln Ala
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Leu Glu Ile Ser Leu	Asp Gln Glu His Ile	Pro Phe Gly Pro Val Val
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Tyr Gln Thr Gln Ala	Thr Arg Arg Ile Leu	Met Leu Asn Thr Gly Asp
355	360	365
Val Gly Ala Arg Phe	Lys Trp Asp Ile Lys	Lys Phe Glu Pro His Phe
370	375	380
Ser Ile Ser Pro Glu	Glu Gly Tyr Ile Thr	Ser Gly Met Glu Val Ser
385	390	395
Phe Glu Val Thr Tyr	His Pro Thr Glu Val	Gly Lys Glu Ser Leu Cys
405	410	415
Lys Asn Ile Leu Cys	Tyr Ile Gln Gly Gly	Ser Pro Leu Ser Leu Thr
420	425	430
Leu Ser Gly Val Cys	Val Gly Pro Pro Ala	Val Lys Glu Val Val Asn
435	440	445
Phe Thr Cys Gln Val	Arg Ser Lys His Thr	Gln Thr Ile Leu Leu Ser
450	455	460
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465	470	475
His Trp Glu Gly Pro	Glu Phe Ile Thr Leu	Glu Ala His Gln Gln Asn
485	490	495
Lys Pro Tyr Glu Ile	Thr Tyr Arg Pro Arg	Thr Met Asn Leu Glu Asn
500	505	510
Arg Lys His Gln Gly	Thr Leu Phe Phe Pro	Leu Pro Asp Gly Thr Gly
515	520	525
Trp Leu Tyr Ala Leu	His Gly Thr Ser Glu	Leu Pro Lys Ala Val Ala
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Asn Ile Tyr Arg Glu	Val Pro Cys Lys Thr	Pro Tyr Thr Glu Leu Leu
545	550	555
Pro Ile Thr Asn Trp	Leu Asn Lys Pro Gln	Arg Phe Arg Val Ile Val
565	570	575
Glu Ile Leu Lys Pro	Glu Lys Pro Asp Leu	Ser Ile Thr Met Lys Gly
580	585	590
Leu Asp Tyr Ile Asp	Val Leu Ser Gly Ser	Lys Lys Asp Tyr Lys Leu
595	600	605
Asn Phe Phe Ser His	Lys Glu Gly Thr Tyr	Ala Ala Lys Val Ile Phe
610	615	620
Arg Asn Glu Val Thr	Asn Glu Phe Leu Tyr	Tyr Asn Val Ser Phe Arg
625	630	635
Val Ile Pro Ser Gly	Ile Ile Lys Thr Ile	Glu Met Val Thr Pro Val

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<210> 2900

<211> 189

<212> PRT

<213> Homo sapiens

<400> 2900

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		20					25					30		
Asp	Glu	Ser	Ser	Val	Lys	Lys	Met	Ile	Leu	Thr	Phe	Glu	Lys	Arg
	35					40					45			Ser
Tyr	Lys	Asn	Gln	Glu	Leu	Arg	Ile	Lys	Phe	Pro	Asp	Asn	Pro	Glu
	50				55					60				Lys
Phe	Met	Glu	Ser	Glu	Leu	Asp	Leu	Asn	Asp	Ile	Ile	Gln	Glu	Met
65					70				75					80
Val	Val	Ala	Thr	Met	Pro	Asp	Leu	Tyr	His	Leu	Leu	Val	Glu	Leu
				85					90					95
Ala	Val	Gln	Ser	Leu	Leu	Gly	Leu	Leu	Gly	His	Asp	Asn	Thr	Asp
		100					105						110	Val
Ser	Ile	Ala	Val	Val	Asp	Leu	Leu	Gln	Glu	Leu	Thr	Asp	Ile	Asp
	115					120					125			Thr
Leu	His	Glu	Ser	Glu	Glu	Gly	Ala	Glu	Val	Leu	Ile	Asp	Ala	Leu
	130				135						140			Val
Asp	Gly	Gln	Val	Val	Ala	Leu	Leu	Val	Gln	Asn	Leu	Glu	Arg	Leu
145				150					155					160
Glu	Ser	Val	Lys	Glu	Glu	Ala	Asp	Gly	Val	His	Asn	Thr	Leu	Ala
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<211> 756

<212> DNA

<213> Homo sapiens

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<210> 2902

<211> 158

<212> PRT

<213> Homo sapiens

<400> 2902

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Glu	Ser	Leu	Glu	Glu	Glu	Glu	Ala	Leu	Asp	Pro	Leu	Gly	Ile	Met	Arg
		35					40					45			
Ser	Lys	Lys	Pro	Lys	Lys	His	Pro	Lys	Val	Ala	Val	Lys	Ala	Lys	Pro
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Ser	Pro	Arg	Leu	Thr	Ile	Phe	Asp	Glu	Glu	Val	Asp	Pro	Asp	Glu	Gly
65					70					75				80	
Leu	Phe	Gly	Pro	Gly	Arg	Lys	Leu	Ser	Pro	Gln	Asp	Pro	Ser	Glu	Asp
			85						90					95	
Val	Ser	Ser	Met	Asp	Pro	Leu	Lys	Leu	Phe	Asp	Asp	Pro	Asp	Leu	Gly
			100					105						110	
Gly	Ala	Ile	Pro	Leu	Gly	Asp	Ser	Leu	Leu	Leu	Pro	Ala	Ala	Cys	Glu
		115					120					125			
Ser	Gly	Gly	Pro	Thr	Pro	Ser	Leu	Ser	His	Arg	Asp	Ala	Ser	Lys	Glu

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 <211> 542
 <212> DNA
 <213> Homo sapiens

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 <212> PRT
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<400> 2904
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 35 40 45
 Asn Thr Arg Leu Phe Lys Glu Val Asp Gly Glu Gly Lys Pro Tyr Tyr
 50 55 60
 Glu Val Arg Leu Ala Ser Val Leu Gly Ser Glu Pro Ser Leu Asp Ser
 65 70 75 80
 Glu Val Thr Ser Lys Leu Lys Ser Tyr Glu Phe Arg Gly Ser Pro Phe
 85 90 95
 Gln Val Thr Arg Gly Asp Tyr Ala Pro Ile Leu Gln Lys Val Val Glu
 100 105 110
 Gln Leu Glu Lys Ala Lys Ala Tyr Ala Ala Asn Ser His Gln Gly Gln
 115 120 125
 Met Leu Ala Gln Tyr Ile Glu Ser Phe Thr Gln Gly Ser Ile Glu Ala

130	135	140
His Lys Arg Gly Ser Arg Phe Trp Ile Gln Asp Lys Gly Pro His Arg		
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Pro Pro Ser Arg		175
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<210> 2905

<211> 814

<212> DNA

<213> Homo sapiens

<400> 2905

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<211> 200

<212> PRT

<213> Homo sapiens

<400> 2906

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Thr Leu Phe Gln Asn Trp Val Ser Gly Phe Leu Leu Cys Pro Gly Phe		30

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<210> 2910

<211> 153

<212> PRT

<213> Homo sapiens

<400> 2910

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Thr Glu Pro Pro Val Phe Cys Leu Arg Ala Ser Phe Met Ala Trp Thr
      35           40           45
Gly Asn Ala Met Cys Ser His Lys Cys Thr Thr Ile Val His Gln His
      50           55           60
Leu Tyr Asn Ile Lys Gly Val Ile Tyr Lys Ser Thr Ala Ile Val His
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Arg Met Val Met Ala Gly Glu Pro Arg Pro Pro Val Leu Cys Ser Phe
      85           90           95
Ser Thr Gly Glu His Leu Gly Ser Cys His Lys Ala Arg Gly Gly Pro
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Ser Leu Gly Leu Ser Trp Gly Arg Gln Gln Val Cys Lys Asp Ser Ser
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<210> 2911

<211> 1327

<212> DNA

<213> Homo sapiens

<400> 2911

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cttctttcaa gcagtattga tcgaacagca acgctccgaa agacagcatc tgaaaattca
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840

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<210> 2912

<211> 350

<212> PRT

<213> Homo sapiens

<400> 2912

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			20					25					30		
Arg	Ser	Ser	Gly	Gly	Gly	Gly	Trp	Ala	Asp	Pro	Arg	Thr	Cys	Leu	Ser
		35					40					45			
Leu	Leu	Ser	Leu	Gly	Thr	Cys	Leu	Gly	Leu	Ala	Trp	Phe	Val	Phe	Gln
		50				55					60				
Gln	Ser	Glu	Lys	Phe	Ala	Lys	Val	Glu	Asn	Gln	Tyr	Gln	Leu	Leu	Lys
65				70					75					80	
Leu	Glu	Thr	Asn	Glu	Phe	Gln	Gln	Leu	Gln	Ser	Lys	Ile	Ser	Leu	Ile
			85						90					95	
Ser	Glu	Lys	Trp	Gln	Lys	Ser	Glu	Ala	Ile	Met	Glu	Gln	Leu	Lys	Ser
			100					105					110		
Phe	Gln	Ile	Ile	Ala	His	Leu	Lys	Arg	Leu	Gln	Glu	Glu	Ile	Asn	Glu
		115					120					125			
Val	Lys	Thr	Trp	Ser	Asn	Arg	Ile	Thr	Glu	Lys	Gln	Asp	Ile	Leu	Asn
		130				135					140				
Asn	Ser	Leu	Thr	Thr	Leu	Ser	Gln	Asp	Ile	Thr	Lys	Val	Asp	Gln	Ser
145					150						155			160	
Thr	Thr	Ser	Met	Ala	Lys	Asp	Val	Gly	Leu	Lys	Ile	Thr	Ser	Val	Lys
			165						170					175	
Thr	Asp	Ile	Arg	Arg	Ile	Ser	Gly	Leu	Val	Thr	Asp	Val	Ile	Ser	Leu
			180					185					190		
Thr	Asp	Ser	Val	Gln	Glu	Leu	Glu	Asn	Lys	Ile	Glu	Lys	Val	Glu	Lys
		195					200					205			
Asn	Thr	Val	Lys	Asn	Ile	Gly	Leu	Leu	Ser	Ser	Ser	Ile	Asp	Arg	
		210				215					220				
Thr	Ala	Thr	Leu	Arg	Lys	Thr	Ala	Ser	Glu	Asn	Ser	Gln	Arg	Ile	Asn

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225          230          235          240
Ser Val Lys Lys Thr Leu Thr Glu Leu Lys Ser Asp Phe Asp Lys His
          245          250          255
Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp Arg Ala Lys Val Leu Lys
          260          265          270
Thr Val Thr Phe Ala Asn Asp Leu Lys Pro Lys Val Tyr Asn Leu Lys
          275          280          285
Lys Asp Phe Ser Arg Leu Glu Pro Leu Val Asn Asp Leu Thr Leu Arg
          290          295          300
Ile Gly Arg Leu Val Thr Asp Leu Leu Gln Arg Glu Lys Glu Ile Ala
305          310          315          320
Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr Ile Val Gln Ala Glu Ile
          325          330          335
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<210> 2913

<211> 361

<212> DNA

<213> Homo sapiens

<400> 2913

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240
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<210> 2914

<211> 112

<212> PRT

<213> Homo sapiens

<400> 2914

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Met Ala Gly Gly Ser Ser Gly Ser Ser Glu Lys Met Ala Arg Tyr
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Trp Val Met Ile Ser Lys Arg Trp Thr Arg Glu Ala Leu Asp Gly Phe
          20          25          30
Cys Asn Met Glu Ile Gly Ile Ile Ile Arg Asn Gly Ser Gln Asp Gly
          35          40          45
Pro Glu Pro Ser Ile Ser Gly Leu Lys Lys Leu His Pro Gln Leu Ser
50          55          60
Leu Ser Glu Asp Val His Ala Pro Gln Val Ala Asn Asp Thr Glu Ala
65          70          75          80
Gly Arg Lys Leu Asp Val Gly Pro Gln Leu Leu Asp Gln Leu Ala Gln

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[illegible]

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<210> 2917
<211> 2636
<212> DNA
<213> Homo sapiens
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gaactgacca agcacagcac atcagcgggt gatctatcca ctngctttgc ccagatcagc
180
cacactgccc ggcagctgga ctggccagac ccagaggagg ccttcattgat taccgtcaag
240
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300
cgcgagctct cttcaggcca gaaggaccaa ggccaggcag ccaacatgct gtgtgtggtg
360
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420
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gaggcccttg agcagcgggt aggggcccgtg ctggagcagg ggcagctgca gaacacgctg
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540
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<210> 2918

<211> 509

<212> PRT

<213> Homo sapiens

<400> 2918

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Gln	Lys	Thr	Tyr	Asn	Glu	Ala	Leu	Ala	Arg	Val	Gln	Arg	Xaa	Val	Gln
			20					25					30		
Met	Asp	Glu	Leu	Val	Pro	Leu	Gly	Glu	Leu	Thr	Lys	His	Ser	Thr	Ser
		35					40					45			
Ala	Val	Asp	Leu	Ser	Thr	Xaa	Phe	Ala	Gln	Ile	Ser	His	Thr	Ala	Arg
	50					55					60				
Gln	Leu	Asp	Trp	Pro	Asp	Pro	Glu	Glu	Ala	Phe	Met	Ile	Thr	Val	Lys
65				70					75					80	
Phe	Val	Glu	Asp	Thr	Cys	Arg	Leu	Ala	Leu	Val	Tyr	Cys	Ser	Leu	Ile
			85					90						95	
Lys	Ala	Arg	Ala	Arg	Glu	Leu	Ser	Ser	Gly	Gln	Lys	Asp	Gln	Gly	Gln
		100					105						110		
Ala	Ala	Asn	Met	Leu	Cys	Val	Val	Val	Asn	Asp	Met	Glu	Gln	Leu	Arg
		115					120					125			
Leu	Val	Ile	Gly	Lys	Leu	Pro	Ala	Gln	Leu	Ala	Trp	Glu	Ala	Leu	Glu
	130					135					140				
Gln	Arg	Val	Gly	Ala	Val	Leu	Glu	Gln	Gly	Gln	Leu	Gln	Asn	Thr	Leu
145				150					155					160	
His	Ala	Gln	Leu	Gln	Ser	Ala	Leu	Ala	Gly	Leu	Gly	His	Glu	Ile	Arg
			165					170					175		
Thr	Gly	Val	Arg	Thr	Leu	Ala	Glu	Gln	Leu	Glu	Val	Gly	Ile	Ala	Lys
		180					185						190		
His	Ile	Gln	Lys	Leu	Val	Gly	Val	Arg	Glu	Ser	Val	Leu	Pro	Glu	Asp
	195					200						205			
Ala	Ile	Leu	Pro	Leu	Met	Lys	Phe	Leu	Glu	Val	Glu	Leu	Cys	Tyr	Met

210		215		220
Asn Thr Asn Leu Val Gln Glu Asn Phe Ser Ser Leu Leu Thr Leu Leu				
225		230		235
Trp Thr His Thr Leu Thr Val Leu Val Glu Ala Ala Ala Ser Gln Arg				240
	245		250	255
Ser Ser Ser Leu Ala Ser Asn Arg Leu Lys Ile Ala Leu Gln Asn Leu				
	260		265	270
Glu Ile Cys Phe His Ala Glu Gly Cys Gly Leu Pro Pro Lys Ala Leu				
	275		280	285
His Thr Ala Thr Phe Gln Ala Leu Gln Arg Asp Leu Glu Leu Gln Ala				
	290		295	300
Ala Ser Ser Arg Glu Leu Ile Arg Lys Tyr Phe Cys Ser Arg Ile Gln				
305		310		315
Gln Gln Ala Glu Thr Thr Ser Glu Glu Leu Gly Ala Val Thr Val Lys				320
	325		330	335
Ala Ser Tyr Arg Ala Ser Glu Gln Lys Leu Arg Val Glu Leu Leu Ser				
	340		345	350
Ala Ser Ser Leu Leu Pro Leu Asp Ser Asn Gly Ser Ser Asp Pro Phe				
	355		360	365
Val Gln Leu Thr Leu Glu Pro Arg His Glu Phe Pro Glu Leu Ala Ala				
	370		375	380
Arg Glu Thr Gln Lys His Lys Lys Asp Leu His Pro Leu Phe Asp Glu				
385		390		395
Thr Phe Glu Phe Leu Val Pro Ala Glu Pro Cys Arg Lys Ala Gly Ala				400
	405		410	415
Cys Leu Leu Leu Thr Val Leu Asp Tyr Asp Thr Leu Gly Ala Asp Asp				
	420		425	430
Leu Glu Gly Glu Ala Phe Leu Pro Leu Arg Glu Val Pro Gly Leu Ser				
	435		440	445
Gly Ser Glu Glu Pro Gly Glu Val Pro Gln Thr Arg Leu Pro Leu Thr				
	450		455	460
Tyr Pro Ala Pro Asn Gly Asp Pro Ile Leu Gln Leu Leu Glu Gly Arg				
465		470		475
Lys Gly Asp Arg Glu Ala Gln Val Phe Val Arg Leu Arg Arg His Arg				
	485		490	495
Ala Lys Gln Ala Ser Gln His Ala Leu Arg Pro Ala Pro				
	500		505	

<210> 2919

<211> 455

<212> DNA

<213> Homo sapiens

<400> 2919

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180

gctggctggc tcaggatggc ttacctatg tggctccttg agagatcatt gagaagacta

240

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300

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 455

<210> 2920

<211> 143

<212> PRT

<213> Homo sapiens

<400> 2920

Met	Ala	Trp	Ala	Ala	Phe	Gln	Val	Leu	Ala	Ile	Arg	Cys	Phe	Glu	Trp
1			5					10					15		
Glu	Lys	Glu	Glu	Gly	Gly	Ser	Thr	Glu	Ala	Val	His	Ser	Gly	Leu	Ala
		20					25					30			
Arg	Gln	Val	Ser	Ser	Leu	Leu	Thr	Asn	His	Leu	Ala	Arg	Ala	Thr	Glu
	35					40					45				
Cys	Cys	Gly	Asn	Gln	Ala	Ala	Gly	Asn	Asp	Ala	Leu	Gln	Asp	Val	Leu
	50				55					60					
Ser	Leu	Leu	Asn	Asp	Leu	Ser	Arg	Ser	His	Ile	Gly	Lys	Ala	Ile	Leu
65				70					75					80	
Ser	Gln	Pro	Ala	Cys	Val	Ser	Lys	Leu	Leu	Ser	Leu	Leu	Leu	Asp	Gln
			85					90						95	
Arg	Pro	Ser	Pro	Lys	Leu	Val	Leu	Ile	Ile	Leu	Gln	Leu	Cys	Arg	Ala
			100					105					110		
Ala	Leu	Pro	Leu	Met	Ser	Val	Glu	Asp	Cys	Gly	Asn	Val	Glu	Leu	Pro
		115					120					125			
Pro	Trp	Ser	Tyr	Ser	Val	Pro	Ser	Leu	Asn	Ser	Glu	Gln	Glu	Asp	
	130					135					140				

<210> 2921 /

<211> 1855

<212> DNA

<213> Homo sapiens

<400> 2921

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 180
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 480

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1740
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1855

<210> 2922

<211> 452

<212> PRT

<213> Homo sapiens

<400> 2922

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Lys Ile Val Arg Ala Gln Gly Gln Tyr Met Tyr Asp Glu Gln Gly Ala			
35	40	45	
Glu Tyr Ile Asp Cys Ile Ser Asn Val Ala His Val Gly His Cys His			
50	55	60	
Pro Leu Val Val Gln Ala Ala His Glu Gln Asn Gln Val Leu Asn Thr			
65	70	75	80
Asn Ser Arg Tyr Leu His Asp Asn Ile Val Asp Tyr Ala Gln Arg Leu			
85	90	95	
Ser Glu Thr Leu Pro Glu Gln Leu Cys Val Phe Tyr Phe Leu Asn Ser			
100	105	110	
Gly Ser Glu Ala Asn Asp Leu Ala Leu Arg Leu Ala Arg His Tyr Thr			
115	120	125	
Gly His Gln Asp Val Val Val Leu Asp His Ala Tyr His Gly His Leu			
130	135	140	
Ser Ser Leu Ile Asp Ile Ser Pro Tyr Lys Phe Arg Asn Leu Asp Gly			
145	150	155	160
Gln Lys Glu Trp Val His Val Ala Pro Leu Pro Asp Thr Tyr Arg Gly			
165	170	175	
Pro Tyr Arg Xaa Arg Thr Thr Pro Thr Gln Leu Trp Xaa Tyr Ala Asn			
180	185	190	
Glu Val Lys Arg Val Val Ser Ser Ala Gln Glu Lys Gly Arg Lys Ile			
195	200	205	
Ala Ala Phe Phe Ala Glu Ser Leu Pro Ser Val Gly Gly Gln Ile Ile			
210	215	220	
Pro Pro Ala Gly Tyr Phe Ser Gln Val Ala Glu His Ile Arg Lys Ala			
225	230	235	240
Gly Gly Val Phe Val Ala Asp Glu Ile Gln Val Gly Phe Gly Arg Val			
245	250	255	
Gly Lys His Phe Trp Ala Phe Gln Leu Gln Gly Lys Asp Phe Val Pro			
260	265	270	
Asp Ile Val Thr Met Gly Lys Ser Ile Gly Asn Gly His Pro Val Ala			
275	280	285	
Cys Val Ala Ala Thr Gln Pro Val Ala Arg Ala Phe Glu Ala Thr Gly			
290	295	300	
Val Glu Tyr Phe Asn Thr Phe Gly Gly Ser Pro Val Ser Cys Ala Val			
305	310	315	320
Gly Leu Ala Val Leu Asn Val Leu Glu Lys Glu Gln Leu Gln Asp His			
325	330	335	
Ala Thr Ser Val Gly Ser Phe Leu Met Gln Leu Leu Trp Gln Gln Lys			
340	345	350	
Ile Arg His Pro Ile Val Gly Asp Val Arg Gly Val Gly Leu Phe Ile			
355	360	365	
Gly Val Asp Leu Ile Lys Asp Glu Ala Thr Arg Thr Pro Ala Thr Glu			
370	375	380	
Glu Ala Xaa Val Tyr Leu Val Ser Arg Leu Lys Glu Asn Tyr Val Leu			
385	390	395	400
Leu Ser Thr Asp Gly Pro Gly Arg Asn Ile Leu Lys Phe Lys Pro Pro			
405	410	415	
Met Cys Phe Ser Leu Asp Asn Ala Arg Gln Val Val Ala Lys Leu Asp			
420	425	430	
Ala Ile Leu Thr Asp Met Glu Glu Lys Val Arg Ser Cys Glu Thr Leu			

435
Arg Leu Gln Pro
450

440

445

<210> 2923
<211> 572
<212> DNA
<213> Homo sapiens

<400> 2923
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<213> Homo sapiens

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<211> 305

<212> PRT

<213> Homo sapiens

<400> 2926

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Ser	Gln	Val	Glu	Ser	Glu	Ser	Ser	Val	Leu	Asn	Asp	Ser	Pro	Phe	Pro
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His	Gly	Phe	Glu	Lys	Pro	Leu	Asp	Ser	Ala	Met	Ser	Ala	Glu	Glu	Asp
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Thr	Asp	Val	Arg	Gly	Arg	Arg	Lys	Lys	Lys	Thr	Pro	Arg	Lys	Ala	Glu
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Asp	Thr	Arg	Glu	Asn	Arg	Lys	Leu	Glu	Asn	Lys	Asn	Ala	Phe	Leu	Glu
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Gly	Arg	Arg	Leu	Ser	Gly	Glu	Glu	Arg	Gly	Leu	Trp	Ser	Thr	Asp	Ser
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 His Lys Lys Tyr Ser Tyr Ile Arg Lys Thr Arg Pro Asp Gly Asn Cys
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 Phe Tyr Arg Ala Phe Gly Phe Ser His Leu Glu Ala Leu Leu Asp Asp
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 245 250 255
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<210> 2930
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 <212> PRT
 <213> Homo sapiens

<400> 2930

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Ser Tyr Thr Ile Asp Leu Leu Ser Ala Glu Gln Asn His Ile Lys Phe
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Lys Pro Lys Met Leu Asp Lys Lys Lys Pro Thr Pro Ile Ile Pro Glu
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Lys Thr Val Arg Val Val Ile Asn Phe Lys Lys Thr Gln Lys Thr Ile
145          150          155          160
Val Arg Val Ser Pro His Ala Ser Leu Gln Glu Leu Ala Pro Ile Ile
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Cys Ser Lys Cys Glu Phe Asp Pro Leu His Thr Leu Leu Leu Lys Asp
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Tyr Gln Ser Gln Glu Pro Leu Asp Leu Thr Lys Ser Leu Asn Asp Leu
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Gly Leu Arg Glu Leu Tyr Ala Met Asp Val Asn Arg Glu Ser Cys Gln
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225          230          235          240
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Ala Pro Ala Thr Pro Leu Val Asn Lys His Arg Pro Thr Phe Thr Arg
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Ser Asn Thr Ile Ser Lys Pro Tyr Ile Ser Asn Thr Leu Pro Ser Asp
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Ala Pro Lys Lys Arg Arg Ala Pro Leu Pro Pro Met Pro Ala Ser Gln
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Ser Val Pro Gln Asp Leu Ala His Ile Gln Glu Arg Pro Ala Ser Cys
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Ile Val Lys Ser Met Ser Val Asp Glu Thr Asp Lys Ser Pro Cys Glu
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Ala Gly Arg Val Arg Ala Gly Ser Leu Gln Leu Ser Ser Met Ser Ala
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 240
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 300
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 420
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 480
 aagcagcagt ctctgctgat aaaccagact cagtactgac tcatcatgtc cccaggaacc
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<210> 2932

<211> 90

<212> PRT

<213> Homo sapiens

<400> 2932

Met	Cys	Glu	Pro	Gly	Gln	Arg	Ser	Lys	Val	Asp	Ile	Gly	Leu	Leu	Pro
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Ser	Pro	Gly	Glu	Thr	Gly	Val	Pro	Trp	Arg	Ala	Asp	Asn	Val	Glu	Ser
		20					25					30			
Asn	Lys	Lys	Lys	Arg	Leu	Ala	Leu	Asp	Ser	Glu	Ala	Ala	Val	Ser	Ala
		35				40					45				
Asp	Lys	Pro	Asp	Ser	Val	Leu	Thr	His	His	Val	Pro	Arg	Asn	Leu	Gln
	50				55					60					
Lys	Leu	Cys	Lys	Glu	Arg	Ala	Gln	Lys	Leu	Cys	Arg	Asn	Ser	Thr	Arg
65				70				75						80	
Val	Pro	Ala	Gln	Cys	Thr	Val	Pro	Ser	Arg						
			85					90							

<210> 2933

<211> 688

<212> DNA

<213> Homo sapiens

<400> 2933

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 120
 cgagaaagtc aagaaacgac tagagaactt ctgaaagtta aagacagatt aattgaagta
 180
 gaaagaaata atgctacact gcaagcagag aagcaagcgt tgaaaactca actgaagcaa
 240

cttgagacac agaacaataa ttgagaggct cagattcttg cacttcagag gcagacagtg
 300
 tcattacaag aacagaatac cactcttcaa acacagaatg ccaagcttca ggttgaaaat
 360
 tccaccctta attcccaaag tacctcactc atgaaccaga atgcccact cctaattcag
 420
 cagtcttcct tagaaaatga aaatgaatct gtaatcaaag agcgagaaga cctaaaatct
 480
 ctctatgatt ctctgatcaa agatcatgaa aagctggaac ttcttcatga acgtcaggct
 540
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 660
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 688

<210> 2934

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2934

Gln	Leu	Arg	Gln	Glu	Leu	Lys	Thr	Val	Lys	Lys	Asn	Tyr	Glu	Ala	Leu
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Lys	Gln	Arg	Gln	Asp	Glu	Glu	Arg	Met	Val	Gln	Ser	Ser	Pro	Pro	Ile
			20					25					30		
Ser	Gly	Glu	Asp	Asn	Lys	Trp	Glu	Arg	Glu	Ser	Gln	Glu	Thr	Thr	Arg
	35						40					45			
Glu	Leu	Leu	Lys	Val	Lys	Asp	Arg	Leu	Ile	Glu	Val	Glu	Arg	Asn	Asn
	50					55					60				
Ala	Thr	Leu	Gln	Ala	Glu	Lys	Gln	Ala	Leu	Lys	Thr	Gln	Leu	Lys	Gln
65					70					75				80	
Leu	Glu	Thr	Gln	Asn	Asn	Leu	Gln	Ala	Gln	Ile	Leu	Ala	Leu	Gln	
			85					90					95		
Arg	Gln	Thr	Val	Ser	Leu	Gln	Glu	Gln	Asn	Thr	Thr	Leu	Gln	Thr	Gln
			100					105					110		
Asn	Ala	Lys	Leu	Gln	Val	Glu	Asn	Ser	Thr	Leu	Asn	Ser	Gln	Ser	Thr
		115					120					125			
Ser	Leu	Met	Asn	Gln	Asn	Ala	Gln	Leu	Leu	Ile	Gln	Gln	Ser	Ser	Leu
	130					135					140				
Glu	Asn	Glu	Asn	Glu	Ser	Val	Ile	Lys	Glu	Arg	Glu	Asp	Leu	Lys	Ser
145					150					155				160	
Leu	Tyr	Asp	Ser	Leu	Ile	Lys	Asp	His	Glu	Lys	Leu	Glu	Leu	Leu	His
			165					170						175	
Glu	Arg	Gln	Ala	Ser	Glu	Tyr	Glu	Ser	Leu	Ile	Ser	Lys	His	Gly	Thr
		180						185					190		
Leu	Lys	Ser	Ala	His	Lys	Asn	Leu	Glu	Val	Glu	His	Arg	Asp	Leu	Glu
		195					200					205			
Asp	Arg	Tyr	Asn	Gln	Leu	Leu	Lys	Gln	Lys	Gly	Gln	Leu	Glu	Asp	Leu
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Glu	Lys	Met	Leu	Lys											
225															

<210> 2935
<211> 1200
<212> DNA
<213> Homo sapiens

<400> 2935
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120
aactctaaaa gataaagcaa gaaatgtcaa gtaggttttg cacattgggc tgctttaggc
180
tgtgccctct gattcttctg gtgtactcat gatactctcc cttgggtgcc tccaggctga
240
cgcagctatt tacgttcaga gtgaaatggg ctgtgtggct gggattggga aaggccttgt
300
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360
tcttgccaat acagggacaa gttaaagaag aagaagaaag taaaggtaaa gatggaaaaa
420
aaatccacgc cctctagggg ctcatcatcc aagtcgtcct caaggcagct aagcgagagc
480
ttcaagagca aagagtttgt gtctagtcat gagagctctt cgggagagaa caagagcaaa
540
aagaagagga ggaggagcga ggactctgaa gaagaagaac tagccagtac tccccccagc
600
tcagaggact cagcgtcagg atccgatgag tagaaacgga ggaaggttct ctttgcgctt
660
gccttctcac accccccgga agtcagcagg gaaacgcaga gaactcctat gaaccaccaa
720
aaggctgtaa atgatgaaac atgcaaagct agccacataa catcaagtgt ctttcttca
780
gcctctctcg gtaaagcatc atctcgaaag ccatttggga tcttttctcc aaatgttctg
840
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gcaccatctg caacgatcca ccagggcgaa gaagaaggac cacttgatat ctgggctgtt
960
gtgaaacctg gaaataccaa ggaaaaaatt gcattctttg catcccacca gtgtagtaac
1020
aggataggat ctatgaaaat aaaaagtcc tgggatattg atgggagagc tactaagaga
1080
aggaaaaaat caggggatct taaaaagcc aaggtaacag tggaaaggat gagggaggtt
1140
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1200

<210> 2936
<211> 109
<212> PRT
<213> Homo sapiens

<400> 2936
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Pro Leu Pro Ser Cys Gln Tyr Arg Asp Lys Leu Lys Lys Lys Lys Lys			
20	25	30	
Val Lys Val Lys Met Glu Lys Lys Ser Thr Pro Ser Arg Gly Ser Ser			
35	40	45	
Ser Lys Ser Ser Ser Arg Gln Leu Ser Glu Ser Phe Lys Ser Lys Glu			
50	55	60	
Phe Val Ser Ser Asp Glu Ser Ser Ser Gly Glu Asn Lys Ser Lys Lys			
65	70	75	80
Lys Arg Arg Arg Ser Glu Asp Ser Glu Glu Glu Glu Leu Ala Ser Thr			
85	90	95	
Pro Pro Ser Ser Glu Asp Ser Ala Ser Gly Ser Asp Glu			
100	105		

<210> 2937

<211> 749

<212> DNA

<213> Homo sapiens

<400> 2937

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120
ctctcaaatt ttgtcttctg tcaatacaca ttctgggacc agtgtgagtc tacgggtggct
180
gccccggtgg tggaccccgga ggtgccttca ccacagtcca aggatgcccc gtacacagtg
240
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300
tcagatggag cactggccat tgaagtatgg ggccaccggt gtgctggaaa tggcagctcc
360
atctgggagg tcgattctct tcatgctaag acaagaacac tgcattgacag gtggaatgaa
420
gtaacgcgaa gaatagaaat gtggatctcc atattagaat tgaatgagtt aggagagtat
480
gctgcagtgg aacttcatca ggcaaaaagat gtcaacacag gaggcattct tcaacttaga
540
cagggtcatt cccgtagagt acaagtcacg gtgaaacctg tgcagcatte agggacactg
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agttatcagg aagaagactt aaactgcag
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<210> 2938

<211> 249

<212> PRT

<213> Homo sapiens

<400> 2938

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20	25	30	
Glu Ala Thr Gly Leu Pro Leu Asn Leu Ser Asn Phe Val Phe Cys Gln			
35	40	45	
Tyr Thr Phe Trp Asp Gln Cys Glu Ser Thr Val Ala Ala Pro Val Val			
50	55	60	
Asp Pro Glu Val Pro Ser Pro Gln Ser Lys Asp Ala Gln Tyr Thr Val			
65	70	75	80
Thr Phe Ser His Cys Lys Asp Tyr Val Val Asn Val Thr Glu Glu Phe			
85	90	95	
Leu Glu Phe Ile Ser Asp Gly Ala Leu Ala Ile Glu Val Trp Gly His			
100	105	110	
Arg Cys Ala Gly Asn Gly Ser Ser Ile Trp Glu Val Asp Ser Leu His			
115	120	125	
Ala Lys Thr Arg Thr Leu His Asp Arg Trp Asn Glu Val Thr Arg Arg			
130	135	140	
Ile Glu Met Trp Ile Ser Ile Leu Glu Leu Asn Glu Leu Gly Glu Tyr			
145	150	155	160
Ala Ala Val Glu Leu His Gln Ala Lys Asp Val Asn Thr Gly Gly Ile			
165	170	175	
Phe Gln Leu Arg Gln Gly His Ser Arg Arg Val Gln Val Thr Val Lys			
180	185	190	
Pro Val Gln His Ser Gly Thr Leu Pro Leu Met Val Glu Ala Ile Leu			
195	200	205	
Ser Val Ser Ile Gly Cys Val Thr Ala Arg Ser Thr Lys Leu Gln Arg			
210	215	220	
Gly Leu Asp Ser Tyr Gln Arg Asp Asp Glu Asp Gly Asp Asp Met Asp			
225	230	235	240
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245			

<210> 2939

<211> 2405

<212> DNA

<213> Homo sapiens

<400> 2939

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ccactgcac cagccaatag gagcccagcc accatggcgg agctgcagga ggtgcagatc
180
acagaggaga agccactgtt gccaggacag acgcctgagg cggccaagac tcactctgtg
240
gagacaccat acggctctgt cactttcact gtctatggca cccccaacc caaacgcca
300
gcgaccccta cctaccacga tgtgggactc aactataaat cttgcttcca gccactgttt
360
cagttcgagg acatgcagga aatcattcag aactttgtgc gggttcatgt ggatgccct
420
ggaatggaag agggagcccc tgtgttcct ttgggatatc agtaccatc tctggaccag
480

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cttgacagaca tgatcccttg cgtcctgcag tacctaaatt tctctacaat aattggagtt
540
ggtgttggag ctggagccta catcctggcg agatatgctc ttaaccaccc ggacactgtt
600
gaaggctcttg tcctcatcaa cattgatccc aatgccaaagg gttggatgga ttgggcagcc
660
cacaagctaa caggcctcac ctcttcatt ccggagatga tccttggaaca tcttttcagc
720
caggaagagc tctctggaaa ttctgagttg atacaaaagt acagaaatat cattacacat
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gcacccaacc tggataacat tgaattgtac tggaaacagct acaacaaccg ccgagacctg
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2100

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 2220
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<210> 2940

<211> 357

<212> PRT

<213> Homo sapiens

<400> 2940

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			20					25					30		
Tyr	Gly	Ser	Val	Thr	Phe	Thr	Val	Tyr	Gly	Thr	Pro	Lys	Pro	Lys	Arg
		35					40					45			
Pro	Ala	Ile	Leu	Thr	Tyr	His	Asp	Val	Gly	Leu	Asn	Tyr	Lys	Ser	Cys
		50				55					60				
Phe	Gln	Pro	Leu	Phe	Gln	Phe	Glu	Asp	Met	Gln	Glu	Ile	Ile	Gln	Asn
65					70				75					80	
Phe	Val	Arg	Val	His	Val	Asp	Ala	Pro	Gly	Met	Glu	Glu	Gly	Ala	Pro
				85					90					95	
Val	Phe	Pro	Leu	Gly	Tyr	Gln	Tyr	Pro	Ser	Leu	Asp	Gln	Leu	Ala	Asp
			100					105					110		
Met	Ile	Pro	Cys	Val	Leu	Gln	Tyr	Leu	Asn	Phe	Ser	Thr	Ile	Ile	Gly
	115					120						125			
Val	Gly	Val	Gly	Ala	Gly	Ala	Tyr	Ile	Leu	Ala	Arg	Tyr	Ala	Leu	Asn
	130					135					140				
His	Pro	Asp	Thr	Val	Glu	Gly	Leu	Val	Leu	Ile	Asn	Ile	Asp	Pro	Asn
145					150				155					160	
Ala	Lys	Gly	Trp	Met	Asp	Trp	Ala	Ala	His	Lys	Leu	Thr	Gly	Leu	Thr
				165					170					175	
Ser	Ser	Ile	Pro	Glu	Met	Ile	Leu	Gly	His	Leu	Phe	Ser	Gln	Glu	Glu
			180					185					190		
Leu	Ser	Gly	Asn	Ser	Glu	Leu	Ile	Gln	Lys	Tyr	Arg	Asn	Ile	Ile	Thr
	195					200						205			
His	Ala	Pro	Asn	Leu	Asp	Asn	Ile	Glu	Leu	Tyr	Trp	Asn	Ser	Tyr	Asn
210						215					220				
Asn	Arg	Arg	Asp	Leu	Asn	Phe	Glu	Arg	Gly	Gly	Asp	Ile	Thr	Leu	Arg
225					230				235					240	
Cys	Pro	Val	Met	Leu	Val	Val	Gly	Asp	Gln	Ala	Pro	His	Glu	Asp	Ala
				245					250					255	
Val	Val	Glu	Cys	Asn	Ser	Lys	Leu	Asp	Pro	Thr	Gln	Thr	Ser	Phe	Leu
			260					265					270		
Lys	Met	Ala	Asp	Ser	Gly	Gly	Gln	Pro	Gln	Leu	Thr	Gln	Pro	Gly	Lys

[illegible]

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<210> 2941
<211> 847
<212> DNA
<213> Homo sapiens
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120
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180
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240
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420
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540
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720
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847

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<210> 2942
<211> 229
<212> PRT
<213> Homo sapiens
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<400> 2942

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 20 25 30
 Gly Arg Gly His Asp His Leu Ala Gly Ala Ser Pro Thr Ala Arg Gln
 35 40 45
 His Leu Phe Lys Gln Gly Gln Leu Ser Ala Gln Gly Gly Ala Gln Pro
 50 55 60
 Ser Val Glu Ala Pro Ala Ala Pro Arg Pro Thr Ala Thr Gln Leu Thr
 65 70 75 80
 Arg Asp Leu Leu Arg Ser Arg Gly Ile Ala Gly Leu Tyr Lys Gly Leu
 85 90 95
 Gly Ala Thr Leu Leu Arg Asp Val Pro Phe Ser Val Val Tyr Phe Pro
 100 105 110
 Leu Phe Ala Asn Leu Asn Gln Leu Gly Arg Pro Ala Ser Glu Glu Lys
 115 120 125
 Ser Pro Phe Tyr Val Ser Phe Leu Ala Gly Cys Val Ala Gly Ser Ala
 130 135 140
 Ala Ala Val Ala Val Asn Pro Cys Asp Val Val Lys Thr Arg Leu Gln
 145 150 155 160
 Ser Leu Gln Arg Gly Val Asn Glu Asp Thr Tyr Ser Gly Ile Leu Asp
 165 170 175
 Cys Ala Arg Lys Ile Leu Arg His Glu Gly Pro Ser Ala Phe Leu Lys
 180 185 190
 Gly Ala Tyr Cys Arg Ala Leu Val Ile Ala Pro Leu Phe Gly Ile Ala
 195 200 205
 Gln Val Val Tyr Phe Leu Gly Ile Ala Glu Ser Leu Leu Gly Leu Leu
 210 215 220
 Gln Asp Pro Gln Ala
 225

<210> 2943

<211> 1501

<212> DNA

<213> Homo sapiens

<400> 2943

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 120
 tctagtgttt gggtttcttc gcggctgctc aagatgaacc gactcttcgg gaaagcgaaa
 180
 cccaaggctc cgccgccag cctgactgac tgcattggca cgggtggacag tagagcagaa
 240
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 300
 aagaagatga gagagggtcc tgcaaagaat atgggtcaagc agaaagcctt gcgagtttta
 360
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 420
 aacgccaatt ataccatcca gtctttgaag gacaccaaga ccacggttga tgctatgaaa
 480

ctgggagtaa aggaaatgaa gaaggcatac aagcaagtga agatcgacca gattgaggat
 540
 ttacaagacc agctagagga tatgatggaa gatgcaaagc aaatccaaga agcactgagt
 600
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 720
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 780
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 960
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<210> 2944

<211> 218

<212> PRT

<213> Homo sapiens

<400> 2944

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			20					25					30		
Lys	Lys	Ile	Ser	Arg	Leu	Asp	Ala	Glu	Leu	Val	Lys	Tyr	Lys	Asp	Gln
		35					40					45			
Ile	Lys	Lys	Met	Arg	Glu	Gly	Pro	Ala	Lys	Asn	Met	Val	Lys	Gln	Lys
	50				55					60					
Ala	Leu	Arg	Val	Leu	Lys	Gln	Lys	Arg	Met	Tyr	Glu	Gln	Gln	Arg	Asp
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<210> 2945
<211> 3331
<212> DNA
<213> Homo sapiens
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300
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900

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<211> 463

<212> PRT

<213> Homo sapiens

<400> 2946

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Pro	Ala	Val	Gly	Pro	Thr	Val	Ser	Asn	Met	Ser	Gly	Leu	Asp	Gly	Val
		20					25					30			
Lys	Arg	Thr	Thr	Pro	Leu	Gln	Thr	His	Ser	Ile	Ile	Ile	Ser	Asp	Gln
		35				40						45			
Val	Pro	Ser	Asp	Gln	Asp	Ala	His	Gln	Tyr	Leu	Arg	Leu	Arg	Asp	Gln
	50				55				60						
Ser	Glu	Ala	Thr	Gln	Val	Met	Ala	Glu	Pro	Gly	Glu	Gly	Gly	Ser	Glu
65				70				75						80	
Thr	Val	Ala	Leu	Pro	Pro	Pro	Pro	Ser	Glu	Glu	Gly	Gly	Val	Pro	
			85					90					95		
Gln	Asp	Ala	Ala	Gly	Arg	Gly	Gly	Thr	Pro	Gln	Ile	Arg	Val	Val	Gly
		100					105					110			
Gly	Arg	Gly	His	Val	Ala	Ile	Lys	Ala	Gly	Gln	Glu	Glu	Gly	Gln	Pro
	115					120					125				
Pro	Ala	Glu	Gly	Leu	Ala	Ala	Ser	Val	Val	Met	Ala	Ala	Asp	Arg	
	130				135					140					
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Ala Glu Arg Glu Ser Ala Glu Val Val Lys Glu Gly Leu Ala Glu
          195          200          205
Lys Glu Val Met Glu Glu Gln Met Glu Val Glu Glu Gln Pro Pro Glu
          210          215          220
Gly Glu Glu Ile Glu Val Ala Glu Glu Asp Arg Leu Glu Glu Glu Ala
          225          230          235          240
Arg Glu Glu Glu Gly Pro Trp Pro Leu His Glu Ala Leu Arg Met Asp
          245          250          255
Pro Leu Glu Ala Ile Gln Leu Glu Leu Asp Thr Val Asn Ala Gln Ala
          260          265          270
Asp Arg Ala Phe Gln Gln Leu Glu His Lys Phe Gly Arg Met Arg Arg
          275          280          285
His Tyr Leu Glu Arg Arg Asn Tyr Ile Ile Gln Asn Ile Pro Gly Phe
          290          295          300
Trp Met Thr Ala Phe Arg Asn His Pro Gln Leu Ser Ala Met Ile Arg
          305          310          315          320
Gly Gln Asp Ala Glu Met Leu Arg Tyr Ile Thr Asn Leu Glu Val Lys
          325          330          335
Glu Leu Arg His Pro Arg Thr Gly Cys Lys Phe Lys Phe Phe Phe Arg
          340          345          350
Arg Asn Pro Tyr Phe Arg Asn Lys Leu Ile Val Lys Glu Tyr Glu Val
          355          360          365
Arg Ser Ser Gly Arg Val Val Ser Leu Ser Thr Pro Ile Ile Trp Arg
          370          375          380
Arg Gly His Glu Pro Gln Ser Phe Ile Arg Arg Asn Gln Asp Leu Ile
          385          390          395          400
Cys Ser Phe Phe Thr Trp Phe Ser Asp His Ser Leu Pro Glu Ser Asp
          405          410          415
Lys Ile Ala Glu Ile Ile Lys Glu Asp Leu Trp Pro Asn Pro Leu Gln
          420          425          430
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<210> 2947

<211> 997

<212> DNA

<213> Homo sapiens

<400> 2947

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240

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<210> 2948

<211> 332

<212> PRT

<213> Homo sapiens

<400> 2948

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Lys	Phe	Arg	His	Thr	Glu	Ala	Arg	Pro	Pro	Arg	Arg	Glu	Ser	Trp	Ile
			20					25					30		
Ser	Asp	Ile	Arg	Ala	Gly	Thr	Ala	Pro	Ser	Cys	Arg	Asn	His	Ile	Lys
		35					40					45			
Ser	Ser	Cys	Ser	Leu	Ile	Ala	Phe	Asn	Ser	Asp	Arg	Pro	Gly	Val	Leu
	50					55					60				
Gly	Ile	Val	Pro	Leu	Gln	Gly	Gln	Gly	Glu	Asp	Lys	Arg	Arg	Val	Ala
65					70					75				80	
His	Leu	Gly	Cys	His	Ser	Asp	Leu	Val	Thr	Asp	Leu	Asp	Phe	Ser	Pro
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Phe	Asp	Asp	Phe	Leu	Leu	Ala	Thr	Gly	Ser	Ala	Asp	Arg	Thr	Val	Lys
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Leu	Trp	Arg	Leu	Pro	Gly	Pro	Gly	Gln	Ala	Leu	Pro	Ser	Ala	Pro	Gly
		115					120					125			
Val	Val	Leu	Gly	Pro	Glu	Asp	Leu	Pro	Val	Glu	Val	Leu	Gln	Phe	His
	130					135					140				
Pro	Thr	Ser	Asp	Gly	Ile	Leu	Val	Ser	Ala	Ala	Gly	Thr	Thr	Val	Lys
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Val	Trp	Asp	Ala	Ala	Lys	Gln	Gln	Pro	Leu	Thr	Glu	Leu	Ala	Ala	His

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Gly	Thr	Ala	Cys	Lys	Asp	Lys	Gln	Leu	Gln	Ile	Phe	Asp	Pro	Arg	Thr
195				200				205							
Lys	Pro	Arg	Ala	Ser	Gln	Ser	Thr	Gln	Ala	His	Glu	Asn	Ser	Arg	Asp
210				215				220							
Ser	Arg	Leu	Ala	Trp	Met	Gly	Thr	Trp	Glu	His	Leu	Val	Ser	Thr	Gly
225				230				235				240			
Phe	Asn	Gln	Met	Arg	Glu	Arg	Glu	Val	Lys	Leu	Trp	Asp	Thr	Arg	Phe
245				250				255							
Phe	Ser	Ser	Ala	Leu	Ala	Ser	Leu	Thr	Leu	Asp	Thr	Ser	Leu	Gly	Cys
260				265				270							
Leu	Val	Pro	Leu	Leu	Asp	Pro	Asp	Ser	Gly	Leu	Leu	Val	Leu	Ala	Gly
275				280				285							
Lys	Gly	Glu	Arg	Gln	Leu	Tyr	Cys	Tyr	Glu	Val	Val	Pro	Gln	Gln	Pro
290				295				300							
Ala	Leu	Ser	Pro	Val	Thr	Gln	Cys	Val	Leu	Glu	Ser	Val	Leu	Arg	Gly
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Ala	Ala	Leu	Val	Pro	Arg	Gln	Ala	Leu	Ala	Val	Met				
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<212> DNA
<213> Homo sapiens
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<210> 2950

<211> 279

<212> PRT

<213> Homo sapiens

<400> 2950

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			20					25					30		
Lys	Gly	Lys	Arg	Pro	Asn	Leu	Lys	Val	His	Ile	Asn	Thr	Thr	Ser	Asp
			35				40					45			
Ser	Ile	Leu	Leu	Lys	Phe	Leu	Arg	Pro	Ser	Pro	Asn	Val	Lys	Leu	Glu
	50					55					60				
Gly	Leu	Leu	Leu	Gly	Tyr	Gly	Ser	Asn	Val	Ser	Pro	Asn	Gln	Tyr	Phe
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Pro	Leu	Pro	Ala	Glu	Gly	Lys	Phe	Thr	Glu	Ala	Ile	Val	Asp	Ala	Glu
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Pro	Lys	Tyr	Leu	Ile	Val	Val	Arg	Pro	Ala	Pro	Pro	Pro	Ser	Gln	Lys
			100					105						110	
Lys	Ser	Cys	Ser	Gly	Lys	Thr	Arg	Ser	Arg	Lys	Pro	Leu	Gln	Leu	Val
			115				120					125			
Val	Gly	Thr	Leu	Thr	Pro	Ser	Ser	Val	Phe	Leu	Ser	Trp	Gly	Phe	Leu
	130					135					140				
Ile	Asn	Pro	His	His	Asp	Trp	Thr	Leu	Pro	Ser	His	Cys	Pro	Asn	Asp
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				165					170					175	
Ile	Phe	Gln	Ile	Cys	Pro	Ala	Pro	Glu	Thr	Ile	Val	Glu	Asn	Leu	Lys
			180					185					190		
Pro	Asn	Thr	Val	Tyr	Glu	Phe	Gly	Val	Lys	Asp	Asn	Val	Glu	Gly	Gly
			195				200					205			
Ile	Trp	Ser	Lys	Ile	Phe	Asn	His	Lys	Thr	Val	Val	Gly	Ser	Lys	Lys
	210					215					220				
Val	Asn	Gly	Lys	Ile	Gln	Ser	Thr	Tyr	Asp	Gln	Asp	His	Thr	Val	Pro
225					230					235				240	
Ala	Tyr	Val	Pro	Arg	Lys	Leu	Ile	Pro	Ile	Thr	Ile	Ile	Lys	Gln	Val
				245					250					255	
Ile	Gln	Asn	Val	Thr	His	Lys	Asp	Ser	Ala	Lys	Ser	Pro	Glu	Lys	Ala
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<210> 2951

<211> 3478

<212> DNA

<213> Homo sapiens

<400> 2951

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<211> 493

<212> PRT

<213> Homo sapiens

<400> 2952

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Gly	Pro	Trp	Arg	Asp	Cys	Leu	Gln	Ala	Leu	Glu	Asp	Gly	His	Asp	Thr	275	280	285	
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<211> 1377

<212> DNA

<213> Homo sapiens

<400> 2953

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<211> 181

<212> PRT

<213> Homo sapiens

<400> 2954

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Val	Trp	Leu	Thr	Tyr	Trp	Val	Val	Tyr	Ala	Leu	Phe	Gly	Leu	Ala	Glu
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 Ile Asn Ser Tyr Phe Pro Ile Ser His Tyr Lys Gly His Thr Val Leu
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<211> 1047

<212> PRT

<213> Homo sapiens

<400> 2958

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Ala	Asn	Gly	Ala	Pro	Ala	Ile	Thr	Leu	Leu	Ile	Arg	Glu	Lys	Asn	Glu
			100					105					110		
Ser	Asn	Lys	Ser	Ser	Phe	Asp	Lys	Met	Ile	Glu	Ala	Ile	Lys	Glu	Ser
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<211> 3323

<212> DNA

<213> Homo sapiens

<400> 2959

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<211> 868

<212> PRT

<213> Homo sapiens

<400> 2960

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2195

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<211> 434

<212> DNA

<213> Homo sapiens

<400> 2961

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<400> 2964

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 Leu Met Val His Glu Trp Val Val Val Lys Gly Ala Val Trp Ala Gly
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<211> 3739

<212> DNA

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<400> 2965

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<211> 386

<212> PRT

<213> Homo sapiens

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Ser	Gly	Tyr	Val	Asp	Arg	Asp	Met	Phe	Phe	Lys	Ile	Cys	Glu	Ser	Leu
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<400> 2967

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<211> 126

<212> PRT

<213> Homo sapiens

<400> 2968

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			20					25					30		
Trp	Glu	Asp	Lys	Asp	Glu	Phe	Leu	Asp	Val	Ile	Tyr	Trp	Phe	Arg	Gln
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Ile	Ile	Ala	Val	Val	Leu	Gly	Val	Ile	Trp	Gly	Val	Leu	Pro	Leu	Arg
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Gly	Phe	Leu	Gly	Ile	Ala	Gly	Phe	Cys	Leu	Ile	Asn	Ala	Gly	Val	Leu

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Gly Thr Trp Glu Leu Thr Lys Glu Gly Phe Met Thr Ser Phe Ala Xaa
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<212> DNA

<213> Homo sapiens

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Ser Gln Thr Ile Met Ile Ala Trp Gly Ser Pro Ser Asn Arg Asp Phe
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Met Glu Thr Leu Asn Thr Leu Lys Tyr Ala Asn Arg Ala Arg Asn Ile
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Phe Glu Ser Val Leu Asp Leu Lys Pro Ser Glu Pro Val Gly Thr Gly
      450      455      460
Asn Ser Ala Pro Thr Gln Thr Ser Tyr Gln Arg Arg Asp Thr Pro Thr
      465      470      475      480
Leu Arg Ser Ala Ala Lys Gln His Tyr Leu Lys His Ser Arg Tyr Leu
      485      490      495
Pro Gly Ile Ser Ile Arg Asn Gly Ile Leu Ser Asn Pro Gly Lys Glu
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Phe Ile Pro Pro Asn Pro Trp Ser Ser Ser Gly Leu Ser Gly Lys Ser
      515      520      525
Ser Gly Thr Met Ser Val Ile Ser Lys Val Asn Ser Val Gly Ser Ser
      530      535      540
Ser Thr Ser Ser Ser Gly Leu Thr Gly Asn Tyr Val Pro Ser Phe Leu
      545      550      555      560
Lys Lys Glu Ile Gly Ser Ala Met Gln Arg Val His Leu Ala Pro Ile
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Pro Asp Pro Ser Pro Gly Tyr Ser Ser Leu Lys Ala Met Arg Pro His
      580      585      590
Pro Gly Arg Pro Phe Phe His Thr Gln Pro Arg Ser Thr Pro Gly Leu
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<211> 858

<212> DNA

<213> Homo sapiens

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 35 40 45
 Gly Glu Val Val Lys Ala Phe Ile Val Leu Thr Pro Ala Tyr Ser Ser
 50 55 60
 His Asp Pro Glu Ala Leu Thr Arg Glu Leu Gln Glu His Val Lys Arg
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<210> 2976

<211> 328

<212> PRT

<213> Homo sapiens

<400> 2976

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 35 40 45
 Pro Pro Gly Thr Pro Leu Val Ser Gln Asp Glu Lys Arg Asp Ala Glu
 50 55 60
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<211> 1420
<212> DNA
<213> Homo sapiens
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<210> 2978

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2978

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		20						25					30		
Asp	Pro	Asp	Gly	Ser	Trp	Ala	Gln	Ile	Ala	Glu	Lys	Arg	Ala	Val	Leu
		35				40					45				
Ala	His	Val	Asp	Val	Gln	Thr	Leu	Ser	Ser	Gln	Leu	Ala	Val	Thr	Val
	50				55					60					
Gly	Pro	Gly	Glu	Arg	Arg	Ile	Gly	Pro	Gly	Glu	Pro	Leu	Glu	Leu	Leu
65				70					75				80		
Cys	Asn	Val	Ser	Gly	Ala	Leu	Pro	Pro	Ala	Gly	Arg	His	Ala	Ala	Tyr
			85					90					95		
Ser	Val	Gly	Trp	Glu	Met	Ala	Pro	Ala	Gly	Ala	Pro	Gly	Pro	Gly	Arg
		100					105					110			
Leu	Val	Ala	Gln	Leu	Asp	Thr	Glu	Gly	Val	Gly	Ser	Leu	Xaa	Ala	Leu

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      165              170              175
Glu Ala Ala Ser Ala Arg Ser Arg Pro Leu Pro Val His Val Arg Glu
      180              185              190
Glu Gly Val Val Leu Glu Ala Val Ala Trp Leu Ala Gly Gly Thr Val
      195              200              205
Tyr Arg Gly Glu Thr Ala Ser Leu Leu Cys Asn Ile Ser Val Arg Gly
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Gly Pro Pro Gly Leu Arg Leu Ala Ala Ser Trp Trp Val Glu Arg Pro
225              230              235              240
Glu Asp Gly Glu Leu Ser Ser Val Pro Ala Gln Leu Val Gly Gly Val
      245              250              255
Gly Gln Asp Gly Val Ala Glu Leu Gly Val Arg Pro Gly Gly Gly Pro
      260              265              270
Val Ser Val Glu Leu Val Gly Pro Arg Ser His Arg Leu Arg Leu His
      275              280              285
Ser Leu Gly Pro Glu Asp Glu Gly Val Tyr His Cys Ala Pro Ser Ala
      290              295              300
Trp Val Gln His Ala Asp Tyr Ser Trp Tyr Gln Ala Gly Ser Ala Arg
305              310              315              320
Ser Gly Pro Val Thr Val Tyr Pro Tyr Met His Ala Leu Asp Thr Leu
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Phe Val Pro Leu Leu Val Gly Thr Gly Val Ala Leu Val Thr Gly Ala
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<210> 2979
 <211> 2191
 <212> DNA
 <213> Homo sapiens

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420

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<210> 2980

<211> 140

<212> PRT

<213> Homo sapiens

<400> 2980

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			20					25					30		
Gly	Thr	Glu	His	Gly	Gln	Pro	Phe	Ala	Arg	Gly	Trp	Gly	Ala	Trp	Gly
			35				40					45			
Asn	Ala	Arg	Arg	Ala	Arg	Val	Gly	Arg	Ala	Glu	Cys	Leu	Leu	Ser	Gly
			50			55					60				
Arg	Pro	Pro	Thr	Ala	Val	Leu	Pro	Arg	Leu	Val	Glu	Asn	Leu	Lys	Ala
					70					75				80	
Arg	Val	Pro	Val	Pro	Gly	His	Thr	Glu	Pro	Leu	Trp	Ser	Glu	Gly	Thr
				85					90					95	
Ala	Pro	Gly	Gln	Gly	Leu	Trp	Ser	His	Ala	Pro	Ala	Asp	Gly	Ser	Leu
			100					105					110		
Met	Asn	Leu	Ile	Arg	Thr	Leu	Val	Gly	Ala	Val	Val	Phe	Glu	Leu	Leu
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<210> 2981

<211> 617

<212> DNA

<213> Homo sapiens

<400> 2981

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<210> 2982
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 <212> PRT
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 35 40 45
 Leu Pro Glu Gln Glu Ala Ala Glu Ala Asp Leu Ser Asn Met Glu Arg
 50 55 60
 Val Ser Leu Ser Thr Ala Asp Pro Gln Gly Val Thr Tyr Ala Glu Leu
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<210> 2983
 <211> 614
 <212> DNA
 <213> Homo sapiens

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<210> 2984
<211> 204
<212> PRT
<213> Homo sapiens

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35 40 45
Lys Arg Phe Ile Gly Asp Tyr Glu Pro Asn Thr Gly Lys Leu Tyr Ser
50 55 60
Arg Leu Val Tyr Val Glu Gly Asp Gln Leu Ser Leu Gln Ile Gln Asp
65 70 75 80
Thr Pro Gly Gly Val Gln Ile Gln Asp Ser Leu Pro Gln Val Val Asp
85 90 95
Ser Leu Gln Met Arg Ala Val Ala Glu Gly Phe Leu Leu Val Tyr Ser
100 105 110
Ile Thr Asp Tyr Asp Ser Tyr Leu Ser Ile Arg Pro Leu Tyr Gln His
115 120 125
Ile Arg Lys Val His Pro Asp Ser Lys Ala Pro Val Ile Ile Val Gly
130 135 140
Asn Lys Gly Asp Leu Leu His Ala Arg Gln Val Gln Thr Gln Asp Gly
145 150 155 160
Ile Gln Leu Ala Asn Glu Leu Gly Ser Leu Phe Leu Glu Ile Ser Thr
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Ser Glu Asn Tyr Glu Asp Val Cys Asp Val Phe Gln His Leu Cys Lys
180 185 190
Glu Val Ser Lys Met His Gly Leu Ser Gly Glu Arg
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<210> 2985
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<212> DNA
<213> Homo sapiens

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<210> 2986

<211> 988

<212> PRT

<213> Homo sapiens

<400> 2986

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		675					680					685		Gly
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	690					695					700			Met
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Ser	Gly	Arg	Phe	Ile	Val	Ile	Ile	Pro	Arg	Thr	Val	Ile	Asp	Gly
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Glu	Val	Gly	Lys	Ser	Phe	Glu	Arg	His	Lys	Leu	Lys	Arg	Gln	Asp
		900						905					910	Ala
Asp	Ala	Trp	Thr	Leu	Tyr	Lys	Ile	Leu	Asp	Ser	Cys	Lys	Gln	Leu
	915						920					925		Thr
Leu	Ala	Gln	Gly	Ala	Gly	Glu	Glu	Asp	Pro	Ser	Gly	Met	Val	Thr
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Ile	Thr	Gly	Leu	Pro	Leu	Asp	Asn	Pro	Ser	Val	Leu	Ser	Gly	Pro
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Gln	Ala	Ala	Leu	Gln	Ala	Ala	Ala	His	Ala	Ser	Val	Asp	Ile	Lys
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985

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 <211> 1016
 <212> DNA
 <213> Homo sapiens

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 420
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<210> 2988
 <211> 95
 <212> PRT
 <213> Homo sapiens

<400> 2988
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Phe	Phe	Val	Phe	Leu	Val	Glu	Met	Gly	Phe	His	Tyr	Val	Ser	Gln	Asp
50			55			60									
Gly	Leu	Asp	Leu	Leu	Thr	Ser	Leu	Leu	Ala	Xaa	Leu	Arg	Leu	Pro	Lys
65			70			75			80						
Cys	Trp	Asn	Tyr	Xaa	Arg	Glu	Thr	Pro	Arg	Leu	Val	Ser	Ile	Lys	
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<212> DNA
<213> Homo sapiens
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<210> 2990
 <211> 114
 <212> PRT
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<400> 2990
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 35 40 45
 Asp Val Met Leu Glu Thr Tyr Ser Ser Leu Val Ser Leu Gly His Cys
 50 55 60
 Ile Thr Lys Pro Glu Met Ile Phe Lys Leu Glu Gln Gly Ala Glu Pro
 65 70 75 80
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 Lys Gln Val Phe Ser Gly Ile Cys His Arg Ser Leu Val Glu Leu Gln
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<210> 2991
 <211> 980
 <212> DNA
 <213> Homo sapiens

<400> 2991
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<210> 2992

<211> 64

<212> PRT

<213> Homo sapiens

<400> 2992

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Val	Leu	Cys	Ser	Gly	Leu	Leu	Leu	Gly	Gly	Leu	Gly	Ala	Ala	His	Phe
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<210> 2993

<211> 687

<212> DNA

<213> Homo sapiens

<400> 2993

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<210> 2994

<211> 229

<212> PRT

<213> Homo sapiens

<400> 2994

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			20					25					30		
Ala	Val	Ala	Thr	Ser	Pro	Asp	Gly	Arg	Tyr	Leu	Lys	Phe	Asp	Ile	Glu
		35					40					45			
Ile	Gly	Arg	Gly	Ser	Phe	Lys	Thr	Val	Tyr	Arg	Gly	Leu	Asp	Thr	Asp
	50					55					60				
Thr	Thr	Val	Glu	Val	Ala	Trp	Cys	Glu	Leu	Gln	Thr	Arg	Lys	Leu	Ser
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Arg	Ala	Glu	Arg	Gln	Arg	Phe	Ser	Glu	Glu	Val	Glu	Met	Leu	Lys	Gly
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Leu	Gln	His	Pro	Asn	Ile	Val	Arg	Phe	Tyr	Asp	Ser	Trp	Lys	Ser	Val
			100					105					110		
Leu	Arg	Gly	Gln	Val	Cys	Ile	Val	Leu	Val	Thr	Glu	Leu	Met	Thr	Ser
		115					120					125			
Gly	Thr	Leu	Lys	Thr	Tyr	Leu	Arg	Arg	Phe	Arg	Glu	Met	Lys	Pro	Arg
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Val	Leu	Gln	Arg	Trp	Ser	Arg	Gln	Ile	Leu	Arg	Gly	Leu	His	Phe	Leu
145					150					155				160	
His	Ser	Arg	Val	Pro	Pro	Ile	Leu	His	Arg	Asp	Leu	Lys	Cys	Asp	Asn
			165						170					175	
Val	Phe	Ile	Thr	Gly	Pro	Thr	Gly	Ser	Val	Lys	Ile	Gly	Asp	Leu	Gly
		180					185					190			
Leu	Ala	Thr	Leu	Lys	Arg	Ala	Ser	Phe	Ala	Lys	Ser	Val	Ile	Gly	Thr
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Pro	Glu	Phe	Met	Ala	Pro	Glu	Met	Tyr	Glu	Glu	Lys	Tyr	Asp	Glu	Ala
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<210> 2995

<211> 1879

<212> DNA

<213> Homo sapiens

<400> 2995

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240

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420
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gattacaggt gtgagccact gcaccagcc tggcagtc aa ttttaagcct cctatttccc
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780
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1440
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1620
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1740
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1860

ccccctctat gcagtggta
1879

<210> 2996
<211> 101
<212> PRT
<213> Homo sapiens

<400> 2996
His Gln Glu Arg Asn Phe Thr Leu Ala Ser Asp Tyr Phe Phe Ile Phe
1 5 10 15
Ile Phe Thr Leu Leu Leu Leu Phe Leu Arg Trp Ser Leu Thr
20 25 30
Leu Xaa Thr Gln Ala Gly Ile Gln Trp Cys Asp Leu Ser Ser Leu Gln
35 40 45
Pro Pro Pro Pro Arg Phe Lys Arg Phe Ser Cys Leu Ser Leu Leu Ser
50 55 60
Ser Trp Asp Ser Asp Arg Cys Leu Pro Pro His Pro Gly Asp Phe Cys
65 70 75 80
Ile Phe Ser Arg Asp Gly Val Ser Pro Cys Cys Ser Gly Trp Ser Arg
85 90 95
Thr Pro Asp Leu Lys
100

<210> 2997
<211> 800
<212> DNA
<213> Homo sapiens

<400> 2997
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120
acaaccatac ctgcttcctc tgagataaca agaattgaga tggagtcaac atccaccctg
180
acccccacac caaggagagac cagcacctcc caggagatcc actcagccac aaagccaagc
240
actgttcctt acaaggcact cactagtgcc acgattgagg actccatgac acaagtcatg
300
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360
gtgatcacca ggctctctac ctcccccatc aagacagaat ctacagaaat gaccattacc
420
accctaacag ggtctcctgg ggctacatca aggggtaccc ttaccttgga cacttcaaca
480
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540
gtctttatga gtagaactcc tggagatgtg ccattggctaa cccatccctc tggggaagag
600
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660
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<210> 2998

<211> 266

<212> PRT

<213> Homo sapiens

<400> 2998

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Pro	Gly	Leu	Pro	Glu	Pro	Ser	Lys	Val	Thr	Ser	Pro	Val	Val	Thr	Ser
		20					25					30			
Ser	Thr	Ile	Lys	Asp	Ile	Val	Ser	Thr	Thr	Ile	Pro	Ala	Ser	Ser	Glu
	35				40						45				
Ile	Thr	Arg	Ile	Glu	Met	Glu	Ser	Thr	Ser	Thr	Leu	Thr	Pro	Thr	Pro
	50				55					60					
Arg	Glu	Thr	Ser	Thr	Ser	Gln	Glu	Ile	His	Ser	Ala	Thr	Lys	Pro	Ser
65					70				75					80	
Thr	Val	Pro	Tyr	Lys	Ala	Leu	Thr	Ser	Ala	Thr	Ile	Glu	Asp	Ser	Met
				85					90					95	
Thr	Gln	Val	Met	Ser	Ser	Ser	Arg	Gly	Pro	Ser	Pro	Asp	Gln	Ser	Thr
		100						105					110		
Met	Ser	Gln	Asp	Ile	Ser	Thr	Glu	Val	Ile	Thr	Arg	Leu	Ser	Thr	Ser
		115					120					125			
Pro	Ile	Lys	Thr	Glu	Ser	Thr	Glu	Met	Thr	Ile	Thr	Thr	Gln	Thr	Gly
	130					135						140			
Ser	Pro	Gly	Ala	Thr	Ser	Arg	Gly	Thr	Leu	Thr	Leu	Asp	Thr	Ser	Thr
145					150				155					160	
Thr	Phe	Met	Ser	Gly	Thr	His	Ser	Thr	Ala	Ser	Gln	Arg	Phe	Ser	His
				165					170					175	
Ser	Gln	Met	Thr	Ala	Leu	Met	Ser	Arg	Thr	Pro	Gly	Asp	Val	Pro	Trp
		180						185					190		
Leu	Thr	His	Pro	Ser	Gly	Glu	Glu	Pro	Ala	Ser	Ala	Ser	Phe	Ser	Leu
		195					200					205			
Ala	Ser	Pro	Val	Leu	Thr	Ser	Phe	Phe	Ser	Phe	Phe	Ala	His	Ser	Gln
		210				215						220			
Lys	Pro	Pro	Pro	Phe	Leu	Val	Pro	Gly	Gln	Thr	Phe	Ser	Leu	Gly	Leu
225					230					235				240	
Gly	Lys	Pro	Lys	Met	Trp	Gly	Gln	Pro	Arg	Thr	Glu	Thr	Phe	Pro	Pro
			245					250						255	
Met	Asp	Asn	Leu	Phe	Glu	Lys	Gly	Pro	Phe						
			260					265							

<210> 2999

<211> 550

<212> DNA

<213> Homo sapiens

<400> 2999

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 120
 tgaggggtgc actgaggaca gccagtgct ggctgcagg cacccttaa catgaacagc
 180
 ctggtcacca tgaacagcag caggaggcag acaggctcct gggtggaag aagctggccc
 240
 acagtgaaga cccacctcca agccaggga agcctgaagc ctgggggatg ggtcgccagt
 300
 cccagaaacc gcaagggcaa cttgtggtgc ttttccctgg gccacccat ggccgccc
 360
 ggacgaattg gcatgcactt tctccctct gagggccata aaagcccctg ggctcagcca
 420
 gagctgagcg gatatcagga cgacaagctg cacagaggta ctaccatac caaggcctcc
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 cagggtctcc
 550

<210> 3000
 <211> 167
 <212> PRT
 <213> Homo sapiens

<400> 3000
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 Val Gln Leu Val Val Leu Ile Ser Ala Gln Leu Trp Leu Ser Pro Gly
 20 25 30
 Ala Phe Met Gly Leu Arg Gly Glu Lys Val His Ala Asn Ser Ser Met
 35 40 45
 Gly Gly His Gly Trp Ala Gln Gly Lys Ala Pro Gln Val Ala Leu Ala
 50 55 60
 Val Ser Gly Thr Gly Asp Pro Ser Pro Arg Leu Gln Ala Phe Pro Gly
 65 70 75 80
 Leu Glu Val Gly Leu His Cys Gly Pro Ala Ser Phe His Pro Gly Ala
 85 90 95
 Cys Leu Pro Pro Ala Ala Val His Gly Asp Gln Ala Val His Val Lys
 100 105 110
 Gly Cys Leu Gln Ala Ser Thr Gly Leu Ser Ser Val His Pro Ser Ala
 115 120 125
 Ser Phe Pro Cys Leu Ser Val Pro Lys Ala Trp Arg Gly Pro Lys Trp
 130 135 140
 Gln Gly Gly Trp His Val Ser Thr Thr Pro Ser Met Cys Thr Leu Ser
 145 150 155 160
 Trp Ala Val Thr Ala Pro Gly
 165

<210> 3001
 <211> 1092
 <212> DNA
 <213> Homo sapiens

<400> 3001

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 120
 gaagtacaga gggttagccc ctatgtatgc ctgggggagt cccagaaaagt ggaatcccaa
 180
 ccttgctcag ctcaccagt tttcttctat aaccagaca ttgcaaagac agcagtaccc
 240
 actgagggcat ccagcccagc tcaggccctg ccaccnnca gtaccaaagc atcattgtca
 300
 ggcaagggat acagaacaca gtgctctcac cagactgcag cttgggggac acccagcacg
 360
 gagagaagct gaggcggaac tgcactatct accggccctg gttctcccc tacagctact
 420
 tcgtgtgtgc agacaaagag agccagctgg aggcctatga cttcccagag gtgcagcagg
 480
 atgagggcaa gtgggacaac tgcctttctg aggacatggc tgagaacatc tgttcgtcct
 540
 cttctcccc agagaacact tgccctcgag aagccaccaa gaaatccagg catggcctgg
 600
 actccatcac atcccaggac atcctaattg cttccaggtg gcaccagca cagcagaatg
 660
 gctacaagtg cgtggcctgc tgccgcatgt accccacctt ggaattcctc aagagccaca
 720
 tcaagagggg cttcaggagg ggcttcagct gcaagggtga ctaccgcaag ctcaaagccc
 780
 tctggagcaa ggagcagaag gcccggtgg gagacaggct ctcctccggc agctgccagg
 840
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 900
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 960
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 1020
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 1080
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 1092

<210> 3002

<211> 115

<212> PRT

<213> Homo sapiens

<400> 3002

Met	Ala	Pro	Phe	Arg	Ile	Pro	Gln	Asp	Val	Ile	His	Asn	Ser	Ser	Ala
1				5					10					15	
Trp	Leu	Ser	Leu	Lys	Gly	His	Cys	Ser	Val	Ser	Ala	Leu	Arg	Cys	Leu
			20					25					30		
Glu	Val	Gln	Arg	Leu	Ser	Pro	Tyr	Val	Cys	Leu	Gly	Glu	Ser	Gln	Lys
		35					40				45				
Val	Glu	Ser	Gln	Pro	Cys	Ser	Ala	His	Gln	Cys	Phe	Phe	Tyr	Asn	Pro
	50					55					60				
Asp	Ile	Ala	Lys	Thr	Ala	Val	Pro	Thr	Glu	Ala	Ser	Ser	Pro	Ala	Gln

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65              70              75              80
Ala Leu Pro Pro Xaa Ser Thr Lys Ala Ser Leu Ser Gly Lys Gly Tyr
              85              90              95
Arg Thr Gln Cys Ser His Gln Thr Ala Ala Trp Gly Thr Pro Ser Thr
              100              105              110
Glu Arg Ser
              115

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<210> 3003

<211> 474

<212> DNA

<213> Homo sapiens

<400> 3003

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120
ccaacaggag gaccggaaga gactggcgga gctgctggtc tccgtcctgg aacagggctt
180
gccaccctcc caccgtgtca tctggctgca gagtgtccga atcctgtccc gggaccgcaa
240
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360
caagtgcctg tgcaacctcg tgctcagcag ccctgtggca cagatgctgg cagcagaggg
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474

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<210> 3004

<211> 155

<212> PRT

<213> Homo sapiens

<400> 3004

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Val Ile Met Glu Ala Leu Arg Ser Tyr Asn Gln Glu His Ser Gln Ser
20     25     30
Phe Thr Phe Asp Asp Ala Gln Gln Glu Asp Arg Lys Arg Leu Ala Glu
35     40     45
Leu Leu Val Ser Val Leu Glu Gln Gly Leu Pro Pro Ser His Arg Val
50     55     60
Ile Trp Leu Gln Ser Val Arg Ile Leu Ser Arg Asp Arg Asn Cys Leu
65     70     75     80
Asp Pro Phe Thr Ser Arg Gln Ser Leu Gln Ala Leu Ala Cys Tyr Ala
85     90     95
Asp Ile Ser Val Ser Glu Gly Ser Val Pro Glu Ser Ala Asp Met Asp
100    105    110
Val Val Leu Glu Ser Leu Lys Cys Leu Cys Asn Leu Val Leu Ser Ser
115    120    125
Pro Val Ala Gln Met Leu Ala Ala Glu Ala Arg Leu Val Val Lys Leu

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130 135 140
 Thr Glu Arg Val Gly Leu Tyr Arg Glu Arg Ser
 145 150 155

 <210> 3005
 <211> 799
 <212> DNA
 <213> Homo sapiens

 <400> 3005
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 120
 ccaggcctcg tgaagattgt ccgcaacagc cggcggaag gactgatccg cgcgcggctg
 180
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 240
 aacacgggct gggccgagcc cgcactgtcg cggatccgag aggaccggcg tcgcatcgtg
 300
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 360
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 420
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 480
 gtggaccgcg agtacttcgg agacattggg ctgctggacc ccggcatgga ggtgtatggc
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 660
 tactacgcca agcgaacgc cctgcgcacc gccgaggtgt ggatggatga cttcaagtcc
 720
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 799

<210> 3006
 <211> 266
 <212> PRT
 <213> Homo sapiens

<400> 3006
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 Ile Leu Val Asp Asp Asn Ser Asp Asn Val Glu Leu Lys Phe Asn Leu
 20 25 30
 Asp Gln Tyr Val Asn Lys Arg Tyr Pro Gly Leu Val Lys Ile Val Arg
 35 40 45
 Asn Ser Arg Arg Glu Gly Leu Ile Arg Ala Arg Leu Gln Gly Trp Lys
 50 55 60
 Ala Ala Thr Ala Pro Val Val Gly Phe Phe Asp Ala His Val Glu Phe

65		70		75		80
Asn Thr Gly Trp	Ala Glu Pro Ala Leu Ser Arg	Ile Arg Glu Asp Arg				
	85	90	95			
Arg Arg Ile Val	Leu Pro Ala Ile Asp Asn Ile Lys Tyr Ser Thr Phe					
	100	105	110			
Glu Val Gln Gln Tyr	Ala Asn Ala Ala His Gly Tyr Asn Trp Gly Leu					
	115	120	125			
Trp Cys Met Tyr Ile Ile	Pro Pro Gln Asp Trp Leu Asp Arg Gly Asp					
	130	135	140			
Glu Ser Ala Pro Ile Arg Thr	Pro Ala Met Ile Gly Cys Ser Phe Val					
	145	150	155	160		
Val Asp Arg Glu Tyr Phe Gly Asp	Ile Gly Leu Leu Asp Pro Gly Met					
	165	170	175			
Glu Val Tyr Gly Gly Glu Asn Val	Glu Leu Gly Met Arg Val Trp Gln					
	180	185	190			
Cys Gly Gly Ser Met Glu Val	Leu Pro Cys Ser Arg Val Ala His Ile					
	195	200	205			
Glu Arg Thr Arg Lys Pro Tyr Asn Asn Asp	Ile Asp Tyr Tyr Ala Lys					
	210	215	220			
Arg Asn Ala Leu Arg Thr Ala Glu Val Trp	Met Asp Asp Phe Lys Ser					
	225	230	235	240		
His Val Tyr Met Ala Trp Asn Ile Pro Met Ser	Asn Pro Gly Val Asp					
	245	250	255			
Phe Gly Asp Val Ser Glu Arg Leu Ala Leu						
	260	265				

<210> 3007

<211> 536

<212> DNA

<213> Homo sapiens

<400> 3007

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 120
 actcagctta ttgacctggg agcagacatt agtttgcgga gtcgctggac aaacatgaat
 180
 gctttgcatt atgctgctta ttttgatgtc cctgaactta taagagtgat tttgaaaaca
 240
 tcgaaaccaa aagatgtgga tgccccttgc agtgatttta attttggaac agctttgcat
 300
 attgcagcat acaacttgtg tgcaggtgct gtgaagtgcc tcttgagca gggagcaaat
 360
 cctgcattta ggaatgacaa aggacagatc cctgctgatg ttgttcaga cccagtagat
 420
 atgccgtag agatggctga cgccgagcc actgctaagg aaatcaagca gatgcttcta
 480
 gatgcggtgc ctctgtcatg taacatctca aaggccatgc tcccccttc acgcgt
 536

<210> 3008

<211> 163

<212> PRT

<213> Homo sapiens

<400> 3008

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Met Thr Leu Leu His Tyr Thr Cys Lys Ser Gly Ala His Gly Ile Gly
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Asp Val Glu Thr Ala Val Lys Phe Ala Thr Gln Leu Ile Asp Leu Gly
      20           25           30
Ala Asp Ile Ser Leu Arg Ser Arg Trp Thr Asn Met Asn Ala Leu His
      35           40           45
Tyr Ala Ala Tyr Phe Asp Val Pro Glu Leu Ile Arg Val Ile Leu Lys
      50           55           60
Thr Ser Lys Pro Lys Asp Val Asp Ala Pro Cys Ser Asp Phe Asn Phe
      65           70           75           80
Gly Thr Ala Leu His Ile Ala Ala Tyr Asn Leu Cys Ala Gly Ala Val
      85           90           95
Lys Cys Leu Leu Glu Gln Gly Ala Asn Pro Ala Phe Arg Asn Asp Lys
      100          105          110
Gly Gln Ile Pro Ala Asp Val Val Pro Asp Pro Val Asp Met Pro Leu
      115          120          125
Glu Met Ala Asp Ala Ala Ala Thr Ala Lys Glu Ile Lys Gln Met Leu
      130          135          140
Leu Asp Ala Val Pro Leu Ser Cys Asn Ile Ser Lys Ala Met Leu Pro
      145          150          155          160
Pro Ser Arg

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<210> 3009

<211> 1335

<212> DNA

<213> Homo sapiens

<400> 3009

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120
catggcagta gtctcctcgt tctccgcgcg cgctagccta gctgagtcgc cggtctctgc
180
gctaggggct cccaccgcct ccgcaggcta aggagccgct gccaccaacg agctgtgagg
240
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300
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360
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420
cggaattcaa ttgcaggatt tcctccacgt gtggagcgct ttgaagagtt tgaaggaggt
480
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540
cttataagtg ccttttccag actgacgcgt ttggatgatt tcacctgtaa aaaaataggg
600
tctggcttct tttctgaagt gttcaaggta cgacaccgag cttctgggtca ggtgatggct
660

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cttaagatga acacattgag cagtaaccgg gcaaacatgc tgaaagaagt acagctcatg
 720
 aatagactct cccatcccaa catccttagg ttcattgggtg tatgtgttca tcaaggacaa
 780
 ttgcatgcac ttacagagta tatcaactcc gggaacctgg aacagttgct agacagtaac
 840
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 900
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 960
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 1020
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 1140
 ctctgcgaga tcatcgctcg catccaggcc gatccggact atcttccccg cacagagaat
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<210> 3010

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3010

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Glu	Arg	Leu	Glu	Phe	Glu	Gly	Gly	Gly	Gly	Gly	Glu	Gly	Asn	Val	
		20					25					30			
Ser	Gln	Val	Gly	Arg	Val	Trp	Pro	Ser	Ser	Tyr	Arg	Ala	Leu	Ile	Ser
		35					40					45			
Ala	Phe	Ser	Arg	Leu	Thr	Arg	Leu	Asp	Asp	Phe	Thr	Cys	Lys	Lys	Ile
		50				55					60				
Gly	Ser	Gly	Phe	Phe	Ser	Glu	Val	Phe	Lys	Val	Arg	His	Arg	Ala	Ser
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4440

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 4680
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<210> 3018

<211> 104

<212> PRT

<213> Homo sapiens

<400> 3018

Cys	His	Leu	Glu	Gln	Val	His	Leu	Lys	Pro	Ile	Pro	Lys	Asp	Thr	Pro
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Thr	Thr	Pro	Thr	Pro	Thr	Leu	Ala	Cys	Pro	Ser	Pro	Gln	Cys	Ala	Phe
		20						25					30		
Gln	Arg	Trp	Ile	Thr	Ile	Gln	His	Arg	Trp	Ser	Ser	Ala	Leu	His	Cys
		35					40					45			
Gln	Gly	Leu	Thr	Pro	Thr	Pro	Gly	Ala	Leu	Pro	Asn	Tyr	Leu	Lys	Val
	50					55				60					
Lys	Ala	Asn	Arg	Ala	Ile	Pro	Gln	Ala	Val	Thr	Ser	Thr	Arg	Leu	Gly
65					70					75				80	
Thr	Thr	Lys	Pro	Pro	Cys	Thr	Ile	Thr	Pro	Pro	Cys	Arg	Ala	Val	Arg
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Ser	Thr	Ser	Pro	Arg	Leu	Pro	Thr								
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<210> 3019

<211> 882

<212> DNA

<213> Homo sapiens

<400> 3019

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 120
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 180
 ctttcctgac aggccatggg cgcttgagtg agcagcaggt ggacaggatc atcctccagc
 240
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 300
 ccggaacccc aaggcatcct tgcgtgtgcg gctctgtgac ctctgagcc acctgcagcg
 360
 gagctgtgag cgggactgcc aggagttcta ccgagccctg tatatccatg cccagccctt
 420

gcacagccgc ctgccagcc gccacgtctt gcagaactca gattgcacag agctagactc
 480
 gggcagccag agcggcgagc tgagtaacag gggacccatg agcttcctgg ctggcctggg
 540
 ccttgctgtg ggactggccc tgctcctgta ctgctatccg ccagacccca agggcctgcc
 600
 agggacccgg cgcgtcctcg gtttctcgcc tgtcatcatc gacagacatg tcagccgcta
 660
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 720
 tcacctgcca ctcaacaaaa gagtcctcga gccggcccgc caaggggact gctgcttctt
 780
 tttctaaatg catatttttc attatttata atttgtgtaa aaaacacacc ttcaccttac
 840
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 882

<210> 3020

<211> 58

<212> PRT

<213> Homo sapiens

<400> 3020

Gln	Gly	Thr	His	Glu	Leu	Pro	Gly	Trp	Pro	Gly	Pro	Cys	Cys	Gly	Thr
1				5				10						15	
Gly	Pro	Ala	Pro	Val	Leu	Leu	Ser	Ala	Arg	Pro	Gln	Gly	Pro	Ala	Arg
			20					25					30		
Asp	Pro	Ala	Arg	Pro	Arg	Phe	Leu	Ala	Cys	His	His	Arg	Gln	Thr	Cys
			35				40					45			
Gln	Pro	Leu	Pro	Ala	Gly	Leu	Pro	Gly	Arg						
			50				55								

<210> 3021

<211> 1008

<212> DNA

<213> Homo sapiens

<400> 3021

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 120
 gggcatgtgg gtgccttggg gtagggtaaa ggttccatct tgatcgcggt ggtgtttccc
 180
 aagtgtatac actcacaaa actatactta gaactcaaaa ctgcctaaat atatacttaa
 240
 aatggatgca gttggttatg tataaattat acctcaataa agttgattaa aaacatcaat
 300
 tcctcagaaa attcttttct gaccactccc ctctcagacg aggtcgggcc tcctgggtatg
 360
 cataccata cccactacaa cctgtattta ttttttttga aacatgggtct ctttctgtcg
 420
 tccaggctgg agtgcagtgg cgcaatcatg gatcactgca gccttgacct tcctgggtca
 480

agtgatectc cgggtccacc cccagtagct ggaaccacag gcgcgcttcc acaccggaaa
 540
 gcccatthtc tagaggcgga aaccgaagcg cccagtggga aaggcgaccc gccggggatg
 600
 cgggggtgctc aacgcgctgc cacctggggc ccaacgcgtt gacctcgcg tcaggttgct
 660
 tccgcggaact acggttctgg ctcgctagct ctggaaggga gcaccgggag ggaatggtgg
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 780
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 840
 ggactcgcg agacgggaag caggcgcggtg ctggcggtga cctggggccg gagaggaacg
 900
 ctgggtcccc tcttggggag ttgccaccat tccctcccg tgctcccttc cagagctagc
 960
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 1008

<210> 3022

<211> 94

<212> PRT

<213> Homo sapiens

<400> 3022

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1				5				10					15		
Gly	Leu	Phe	Leu	Ser	Ser	Arg	Leu	Glu	Cys	Ser	Gly	Ala	Ile	Met	Asp
			20				25						30		
His	Cys	Ser	Leu	Asp	Leu	Pro	Gly	Ser	Ser	Asp	Pro	Pro	Gly	Ser	Pro
		35				40					45				
Pro	Val	Ala	Gly	Thr	Thr	Gly	Ala	Leu	Pro	His	Arg	Lys	Ala	His	Phe
	50					55					60				
Leu	Glu	Ala	Glu	Thr	Glu	Ala	Pro	Ser	Gly	Lys	Gly	Asp	Pro	Pro	Gly
65					70					75				80	
Met	Arg	Gly	Ala	Gln	Arg	Ala	Ala	Thr	Trp	Gly	Pro	Thr	Arg		
			85					90							

<210> 3023

<211> 1834

<212> DNA

<213> Homo sapiens

<400> 3023

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 120
 tcagattttt cctccagtt ggtttaattt ctatttccta aaacattaaa ataataatgg
 180
 aatgattgaa ataataaaca tttttcttat tcaagatttc gtcattggta ttgtaaagga
 240
 aaccctagga aaatggtgaa aacttgggca gaaaaagaaa tgagggaactt aatcaggcta
 300

aacacagcag agataccatg tccagaacca ataatgctaa gaagtcatgt tcttgatcag
360
agtttcatcg gtaaagatga catgcctgca ccactcttga aaaatgtcca gttatcagaa
420
tccaaggctc gggagttgta cctgcaggtc attcagtaca tgagaagaat gtatcaggat
480
gccagacttg tccatgcaga tctcagtga tttaacatgc tgtaccacgg tggaggcgtg
540
tatatcattg acgtgtctca gtccgtggag caccgaccacc cacatgcctt ggagttcttg
600
agaaaggatt gcgccaacgt caatgatttc tttatgaggg acagtgttgc tgtcatgact
660
gtgcgggagc tctttgaatt tgtcacagat ccatccatta cacatgagaa catggatgct
720
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780
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1080
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1380
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1440
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1500
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1834

<210> 3024

<211> 347
 <212> PRT
 <213> Homo sapiens

<400> 3024

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Gly Asn Pro Arg Lys Met Val Lys Thr Trp Ala Glu Lys Glu Met Arg
 20          25          30
Asn Leu Ile Arg Leu Asn Thr Ala Glu Ile Pro Cys Pro Glu Pro Ile
 35          40          45
Met Leu Arg Ser His Val Leu Val Met Ser Phe Ile Gly Lys Asp Asp
 50          55          60
Met Pro Ala Pro Leu Leu Lys Asn Val Gln Leu Ser Glu Ser Lys Ala
 65          70          75          80
Arg Glu Leu Tyr Leu Gln Val Ile Gln Tyr Met Arg Arg Met Tyr Gln
 85          90          95
Asp Ala Arg Leu Val His Ala Asp Leu Ser Glu Phe Asn Met Leu Tyr
100          105          110
His Gly Gly Gly Val Tyr Ile Ile Asp Val Ser Gln Ser Val Glu His
115          120          125
Asp His Pro His Ala Leu Glu Phe Leu Arg Lys Asp Cys Ala Asn Val
130          135          140
Asn Asp Phe Phe Met Arg His Ser Val Ala Val Met Thr Val Arg Glu
145          150          155          160
Leu Phe Glu Phe Val Thr Asp Pro Ser Ile Thr His Glu Asn Met Asp
165          170          175
Ala Tyr Leu Ser Lys Ala Met Glu Ile Ala Ser Gln Arg Thr Lys Glu
180          185          190
Glu Arg Ser Ser Gln Asp His Val Asp Glu Glu Val Phe Lys Arg Ala
195          200          205
Tyr Ile Pro Arg Thr Leu Asn Glu Val Lys Asn Tyr Glu Arg Asp Met
210          215          220
Asp Ile Ile Met Lys Leu Lys Glu Glu Asp Met Ala Met Asn Ala Gln
225          230          235          240
Gln Asp Asn Ile Leu Pro Asp Cys Tyr Arg Ile Glu Glu Arg Phe Val
245          250          255
Arg Ser Ser Glu Gly Pro Cys Thr Leu Glu Asn Gln Val Glu Glu Arg
260          265          270
Thr Cys Ser Asp Ser Glu Asp Ile Gly Ser Ser Glu Cys Ser Asp Thr
275          280          285
Asp Ser Glu Glu Gln Gly Asp His Ala Arg Pro Lys Lys His Thr Thr
290          295          300
Asp Pro Asp Ile Asp Lys Lys Glu Arg Lys Lys Met Val Lys Glu Ala
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Gln Arg Glu Lys Arg Lys Asn Lys Ile Pro Lys His Val Lys Lys Arg
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Lys Glu Lys Thr Ala Lys Thr Lys Lys Gly Lys
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<210> 3025
 <211> 1370
 <212> DNA
 <213> Homo sapiens

<400> 3025

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120
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180
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240
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300
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360
aacactatta catgggaaga atatatatct gctgaaaatg gaaaagctcc tcactctgggt
420
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480
gaatttcct tagggataga gttattattg aatgttttag aagtagtagc tcccttcaag
540
cactttaaca agcttagaga atttgttcag atgaagcttc ctccaggctt tcctgtaaaa
600
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720
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780
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1260
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<210> 3026

<211> 152

<212> PRT

<213> Homo sapiens

<400> 3026

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      20           25           30
Trp Glu Glu Tyr Ile Ser Ala Glu Asn Gly Lys Ala Pro His Leu Gly
      35           40           45
Arg Glu Leu Val Cys Lys Glu Ser Lys Lys Thr Phe Lys Ala Thr Ile
      50           55           60
Ala Met Ser Gln Glu Phe Pro Leu Gly Ile Glu Leu Leu Asn Val
      65           70           75           80
Leu Glu Val Val Ala Pro Phe Lys His Phe Asn Lys Leu Arg Glu Phe
      85           90           95
Val Gln Met Lys Leu Pro Pro Gly Phe Pro Val Lys Leu Asp Ile Pro
      100          105          110
Val Phe Pro Thr Ile Thr Ala Thr Val Thr Phe Gln Glu Phe Arg Tyr
      115          120          125
Asp Glu Phe Asp Gly Ser Ile Phe Thr Ile Pro Asp Asp Tyr Lys Glu
      130          135          140
Asp Pro Ser Arg Phe Pro Asp Leu
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<210> 3027

<211> 1154

<212> DNA

<213> Homo sapiens

<400> 3027

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120
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240
aagacagtca aagagaagga tgacattctg tttgaagacc ttcaagacaa tgtgaatgag
300
aatggtgaag gtgaaataga agatgaggag gaggagggtt atgatgatga tgatgatgac
360
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660
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720
aaagaagcta atgtatacca tgctagcaca gcaaatggag agagcagagc aatcaaaatt
780

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 1020
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<210> 3028

<211> 331

<212> PRT

<213> Homo sapiens

<400> 3028

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Asp	Asp	Ala	Asp	Ser	Ser	Asp	Ser	Glu	Asn	Arg	Asp	Leu	Lys	Thr	Val
		20						25					30		
Lys	Glu	Lys	Asp	Asp	Ile	Leu	Phe	Glu	Asp	Leu	Gln	Asp	Asn	Val	Asn
	35					40						45			
Glu	Asn	Gly	Glu	Gly	Glu	Ile	Glu	Asp	Glu	Glu	Glu	Glu	Gly	Tyr	Asp
	50				55					60					
Asp	Asp	Asp	Asp	Asp	Trp	Asp	Trp	Asp	Glu	Gly	Val	Gly	Lys	Leu	Ala
65					70				75					80	
Lys	Gly	Tyr	Val	Trp	Asn	Gly	Gly	Ser	Asn	Pro	Gln	Ala	Asn	Arg	Gln
			85					90						95	
Thr	Ser	Asp	Ser	Ser	Ala	Lys	Met	Ser	Thr	Pro	Ala	Asp	Lys	Val	
		100					105						110		
Leu	Arg	Lys	Phe	Glu	Asn	Lys	Ile	Asn	Leu	Asp	Lys	Leu	Asn	Val	Thr
		115					120					125			
Asp	Ser	Val	Ile	Asn	Lys	Val	Thr	Glu	Lys	Ser	Arg	Gln	Lys	Glu	Ala
	130				135						140				
Asp	Met	Tyr	Arg	Ile	Lys	Asp	Lys	Ala	Asp	Arg	Ala	Thr	Val	Glu	Gln
145				150					155					160	
Val	Leu	Asp	Pro	Arg	Thr	Arg	Met	Ile	Leu	Phe	Lys	Met	Leu	Thr	Arg
			165					170					175		
Gly	Ile	Ile	Thr	Glu	Ile	Asn	Gly	Cys	Ile	Ser	Thr	Gly	Lys	Glu	Ala
		180				185						190			
Asn	Val	Tyr	His	Ala	Ser	Thr	Ala	Asn	Gly	Glu	Ser	Arg	Ala	Ile	Lys
	195					200					205				
Ile	Tyr	Lys	Thr	Ser	Ile	Leu	Val	Phe	Lys	Asp	Arg	Asp	Lys	Tyr	Val
	210				215						220				
Ser	Gly	Glu	Phe	Arg	Phe	Arg	His	Gly	Tyr	Cys	Lys	Gly	Asn	Pro	Arg
225				230					235					240	
Lys	Met	Val	Lys	Thr	Trp	Ala	Glu	Lys	Glu	Met	Arg	Asn	Leu	Ile	Arg
			245					250					255		
Leu	Asn	Thr	Ala	Glu	Ile	Pro	Cys	Pro	Glu	Pro	Ile	Met	Leu	Arg	Ser

	260		265		270										
His	Val	Leu	Val	Met	Ser	Phe	Ile	Gly	Lys	Asp	Asp	Ile	Ser	Phe	His
	275						280					285			
Ser	Arg	Pro	Ala	Pro	Leu	Leu	Lys	Asn	Val	Gln	Leu	Ser	Glu	Ser	Lys
	290					295					300				
Ala	Arg	Glu	Leu	Tyr	Leu	Gln	Val	Ile	Gln	Tyr	Met	Arg	Arg	Met	Tyr
305				310					315						320
Gln	Asp	Ala	Arg	Leu	Val	His	Ala	Asp	Arg	Arg					
			325					330							

<210> 3029

<211> 344

<212> DNA

<213> Homo sapiens

<400> 3029

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120
acatttcccg aggaactaga tatgagtact tttattgatg ttgaagatga aaaatctcct
180
cagactgaaa gttgcactga caggggagca gaaaatgaag gtagttgtca cagtgatcag
240
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300
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344

<210> 3030

<211> 114

<212> PRT

<213> Homo sapiens

<400> 3030

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Leu	Thr	Leu	Gln	Leu	Lys	Arg	Phe	Asp	Phe	Asp	Tyr	Thr	Thr	Met	His
		20					25					30			
Arg	Ile	Lys	Leu	Asn	Asp	Arg	Met	Thr	Phe	Pro	Glu	Glu	Leu	Asp	Met
	35					40						45			
Ser	Thr	Phe	Ile	Asp	Val	Glu	Asp	Glu	Lys	Ser	Pro	Gln	Thr	Glu	Ser
	50				55					60					
Cys	Thr	Asp	Arg	Gly	Ala	Glu	Asn	Glu	Gly	Ser	Cys	His	Ser	Asp	Gln
65				70					75					80	
Met	Ser	Asn	Asp	Phe	Ser	Asn	Asp	Asp	Gly	Val	Asp	Glu	Gly	Ile	Cys
		85						90					95		
Phe	Glu	Thr	Asn	Ser	Gly	Thr	Glu	Lys	Ile	Ser	Lys	Ser	Gly	Pro	Glu
			100				105						110		

Lys Asn

<210> 3031

<211> 567

<212> DNA

<213> Homo sapiens

<400> 3031

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 120
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 180
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 360
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 420
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<210> 3032

<211> 189

<212> PRT

<213> Homo sapiens

<400> 3032

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Val	Pro	Pro	Val	Pro	Pro	Pro	Ser	Tyr	Phe	Ala	Thr	Phe	Tyr	Ser	Cys
			20					25					30		
Thr	Pro	Arg	Met	Asn	Arg	Arg	Leu	Val	Gly	Pro	Asp	Val	Ile	Pro	Leu
		35				40					45				
Pro	His	Ile	Tyr	Gly	Ala	Arg	Ile	Lys	Gly	Val	Glu	Val	Phe	Cys	Pro
	50				55					60					
Leu	Asp	Pro	Pro	Pro	Pro	Tyr	Glu	Ala	Val	Val	Ser	Gln	Met	Asp	Gln
65				70				75					80		
Glu	Gln	Gly	Ser	Ser	Phe	Gln	Met	Ser	Glu	Gly	Ser	Glu	Ala	Ala	Val
			85					90					95		
Ile	Pro	Leu	Asp	Leu	Gly	Cys	Thr	Gln	Val	Thr	Gln	Asp	Gly	Asp	Ile
		100					105					110			
Pro	Asn	Ile	Pro	Ala	Glu	Glu	Asn	Ala	Ser	Thr	Ser	Thr	Pro	Ser	Ser
	115					120					125				
Thr	Leu	Val	Arg	Pro	Ile	Arg	Ser	Arg	Arg	Ala	Leu	Pro	Pro	Leu	Arg
	130				135					140					
Thr	Arg	Ser	Lys	Ser	Asp	Pro	Val	Leu	His	Pro	Ser	Glu	Glu	Arg	Ala
145				150				155						160	
Ala	Pro	Val	Leu	Ser	Cys	Glu	Ala	Ala	Thr	Gln	Thr	Glu	Arg	Arg	Leu
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180

185

<210> 3033

<211> 821

<212> DNA

<213> Homo sapiens

<400> 3033

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120
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180
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240
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300
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360
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420
aaaacaaaaa aagactgtga agagtcatca cataaaaaat ccagattatc ttctgcagaa
480
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540
cttagaaaact ctgatgagga agaaagtgct tcagaatctg aactttggaa ggggtccacta
600
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720
ctcatgcaat ttgaaattcc atctacgtct ttatctgcaa gttacagctt ctgtgctttg
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821

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<210> 3034

<211> 221

<212> PRT

<213> Homo sapiens

<400> 3034

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20          25          30
Trp Glu Lys Arg Leu Ala Lys Lys Tyr Tyr Asp Lys Leu Phe Lys Glu
35          40          45
Tyr Cys Ile Ala Asp Leu Ser Lys Tyr Lys Glu Asn Lys Phe Gly Phe
50          55          60
Arg Trp Arg Val Glu Lys Glu Val Ile Ser Gly Lys Gly Gln Phe Phe
65          70          75          80
Cys Gly Asn Lys Tyr Cys Asp Lys Lys Glu Gly Leu Lys Ser Trp Glu

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				85						90					95				
Val	Asn	Phe	Gly	Tyr	Ile	Glu	His	Gly	Glu	Lys	Arg	Asn	Ala	Leu	Val				
			100						105				110						
Lys	Leu	Arg	Leu	Cys	Gln	Glu	Cys	Ser	Ile	Lys	Leu	Asn	Phe	His	His				
		115					120					125							
Arg	Arg	Lys	Glu	Ile	Lys	Ser	Lys	Lys	Arg	Lys	Asp	Lys	Thr	Lys	Lys				
		130				135					140								
Asp	Cys	Glu	Glu	Ser	Ser	His	Lys	Lys	Ser	Arg	Leu	Ser	Ser	Ala	Glu				
145					150				155					160					
Glu	Ala	Ser	Lys	Lys	Lys	Asp	Lys	Gly	His	Ser	Ser	Ser	Lys	Lys	Ser				
			165					170					175						
Glu	Asp	Ser	Leu	Leu	Arg	Asn	Ser	Asp	Glu	Glu	Glu	Ser	Ala	Ser	Glu				
		180					185					190							
Ser	Glu	Leu	Trp	Lys	Gly	Pro	Leu	Pro	Glu	Thr	Asp	Glu	Lys	Ser	Gln				
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Glu	Glu	Glu	Phe	Asp	Glu	Tyr	Phe	Gln	Asp	Leu	Phe	Leu							
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<210> 3035

<211> 878

<212> DNA

<213> Homo sapiens

<400> 3035

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180
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240
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420
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780
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<210> 3036

<211> 65

<212> PRT

<213> Homo sapiens

<400> 3036

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Glu Cys Asn Gly Ala Ile Ser Ala His Cys Asn Leu Pro Leu Pro Gly
      20             25             30
Ser Ser Asn Ser Pro Asp Pro His Ser Gly Pro Ala Pro Ser Gln Thr
      35             40             45
Val Ile Leu Phe Leu Glu Gly Asn Arg Asp Pro Gly Gly Arg Gly Trp
      50             55             60
Pro
65

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<210> 3037

<211> 3538

<212> DNA

<213> Homo sapiens

<400> 3037

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120
ctcaagctca tagtagatgc tttcttacag cagttaccca actgtgtcaa ccgagatctg
180
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240
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300
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420
aataaaaactg ttcgttttat aggagaacta actaagttta agatgttcac caaaaatgac
480
acactgcatt gtttaaagat gcttctgtca gacttctctc atcaccatat tgaaatggca
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840
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900

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 3420
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<210> 3038

<211> 697

<212> PRT

<213> Homo sapiens

<400> 3038

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Cys	Met	Asn	Met	Asn	Thr	Lys	Ala	Asn	Arg	Lys	Lys	Leu	Val	Arg	Ala
		20						25					30		
Leu	Phe	Ile	Val	Pro	Arg	Gln	Arg	Leu	Asp	Leu	Leu	Pro	Phe	Tyr	Ala
	35					40					45				
Arg	Leu	Val	Ala	Thr	Leu	His	Pro	Cys	Met	Ser	Asp	Val	Ala	Glu	Asp
	50				55					60					
Leu	Cys	Ser	Met	Leu	Arg	Gly	Asp	Phe	Arg	Phe	His	Val	Arg	Lys	Lys
65				70					75					80	
Asp	Gln	Ile	Asn	Ile	Glu	Thr	Lys	Asn	Lys	Thr	Val	Arg	Phe	Ile	Gly
		85					90						95		
Glu	Leu	Thr	Lys	Phe	Lys	Met	Phe	Thr	Lys	Asn	Asp	Thr	Leu	His	Cys

[illegible]

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      565              570              575
Lys Gly Pro Pro Leu Gly Gly Gly Glu Gly Glu Ala Glu Ser Ala Asp
      580              585              590
Thr Met Pro Phe Val Met Leu Thr Arg Lys Gly Asn Lys Gln Gln Phe
      595              600              605
Lys Ile Leu Asn Val Pro Met Ser Ser Gln Leu Ala Ala Asn His Trp
      610              615              620
Asn Gln Gln Gln Ala Glu Gln Glu Glu Arg Met Arg Met Lys Lys Leu
625              630              635              640
Thr Leu Asp Ile Asn Glu Arg Gln Glu Gln Glu Asp Tyr Gln Glu Met
      645              650              655
Leu Gln Ser Leu Ala Gln Arg Pro Ala Pro Ala Asn Thr Asn Arg Glu
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Arg Arg Pro Arg Tyr Gln His Pro Lys Gly Ala Pro Asn Ala Asp Leu
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<210> 3039

<211> 1836

<212> DNA

<213> Homo sapiens

<400> 3039

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120
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660
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720
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780

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 1836

<210> 3040

<211> 142

<212> PRT

<213> Homo sapiens

<400> 3040

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Leu	Pro	Asp	Thr	Ala	Thr	Gly	Leu	Asp	Trp	Thr	His	Leu	Val	Asp	Ala
			20					25					30		
Ala	Arg	Ala	Phe	Glu	Asp	Gln	Arg	Val	Ala	Ser	Phe	Cys	Thr	Leu	Thr
		35					40					45			
Asp	Met	Gln	His	Gly	Gln	Asp	Leu	Glu	Gly	Ala	Gln	Glu	Leu	Pro	Leu
	50					55					60				
Cys	Val	Asp	Pro	Gly	Ser	Gly	Lys	Glu	Phe	Met	Asp	Thr	Thr	Gly	Glu
65					70					75				80	
Arg	Ser	Pro	Ser	Pro	Leu	Thr	Gly	Lys	Val	Asn	Gln	Leu	Glu	Leu	Ile

	85		90		95
Leu Arg Gln	Leu Gln Thr Asp	Leu Arg Lys Glu	Lys Gln Asp	Lys Ala	
	100		105		110
Gly Leu Gln	Ala Glu Val Gln His	Leu Arg Gln Asp	Asn Met Arg	Leu	
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Gln Glu Glu	Ser Gln Thr Ala Thr	Ala Gln Leu Arg	Lys Leu		
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<210> 3041

<211> 1512

<212> DNA

<213> Homo sapiens

<400> 3041

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<210> 3042
 <211> 360
 <212> PRT
 <213> Homo sapiens

<400> 3042
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 35 40 45
 Val Ile Leu Ala Val Ser Tyr Met Ser Gln Val Leu Glu Lys Glu Met
 50 55 60
 Lys Ala Gln Glu Gln Arg Leu Gly Ile Arg Ile Ser Met Ser His Glu
 65 70 75 80
 Glu Glu Pro Leu Gly Thr Ala Gly Pro Leu Ala Leu Ala Arg Asp Leu
 85 90 95
 Leu Ser Glu Thr Ala Asp Pro Phe Phe Val Leu Asn Ser Asp Val Ile
 100 105 110
 Cys Asp Phe Pro Phe Gln Ala Met Val Gln Phe His Arg His His Gly
 115 120 125
 Gln Glu Gly Ser Ile Leu Val Thr Lys Val Glu Glu Pro Ser Lys Tyr
 130 135 140
 Gly Val Val Val Cys Glu Ala Asp Thr Gly Arg Ile His Arg Phe Val
 145 150 155 160
 Glu Lys Pro Gln Val Phe Val Ser Asn Lys Ile Asn Ala Gly Met Tyr
 165 170 175
 Ile Leu Ser Pro Ala Val Leu Arg Arg Ile Gln Leu Gln Pro Thr Ser
 180 185 190
 Ile Glu Lys Glu Val Phe Pro Ile Met Ala Lys Glu Gly Gln Leu Tyr
 195 200 205
 Ala Met Glu Leu Gln Gly Phe Trp Met Asp Ile Gly Gln Pro Lys Asp
 210 215 220
 Phe Leu Thr Gly Met Cys Leu Phe Leu Gln Ser Leu Arg Gln Lys Gln
 225 230 235 240
 Pro Glu Arg Leu Cys Ser Gly Pro Gly Ile Val Gly Asn Val Leu Val
 245 250 255
 Asp Pro Ser Ala Arg Ile Gly Gln Asn Cys Ser Ile Gly Pro Asn Val
 260 265 270
 Ser Leu Gly Pro Gly Val Val Val Glu Asp Gly Val Cys Ile Arg Arg

	275		280		285										
Cys	Thr	Val	Leu	Arg	Asp	Ala	Arg	Ile	Arg	Ser	His	Ser	Trp	Leu	Glu
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Ser	Cys	Ile	Val	Gly	Trp	Arg	Cys	Arg	Val	Gly	Gln	Trp	Val	Arg	Met
305				310						315					320
Glu	Asn	Val	Thr	Val	Leu	Gly	Glu	Asp	Val	Ile	Val	Asn	Asp	Glu	Leu
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Tyr	Leu	Asn	Gly	Ala	Ser	Val	Leu	Pro	His	Lys	Ser	Ile	Gly	Glu	Ser
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 <211> 394
 <212> DNA
 <213> Homo sapiens

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 240
 ccagcctttg tttggggact cggaggcaga gtagacagtt acccttaccc ctggggttggg
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<210> 3044
 <211> 115
 <212> PRT
 <213> Homo sapiens

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 20 25 30
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 35 40 45
 Asn Asp Thr Gln Pro Glu Asp Pro Lys Thr Gly Ser Pro Leu Lys Cys
 50 55 60
 Gln Arg His Val Ser Trp Ser Glu Val Arg Glu Ala Asp Ser Gly Leu
 65 70 75 80
 Leu Leu Gly Gln Thr Pro Val Lys Arg Lys Arg Trp His His Glu Thr
 85 90 95
 Ser Ser Phe Ser Pro Cys Leu Trp Leu Lys Ala Arg Ala Ser Arg Ser
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 Lys Glu Ile

115

<210> 3045
 <211> 605
 <212> DNA
 <213> Homo sapiens

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 180
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 240
 aacattgaaa agtggcctga caatggtagg gaaagtgggtg actcagctga caggcacact
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 360
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 605

<210> 3046
 <211> 72
 <212> PRT
 <213> Homo sapiens

<400> 3046
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 20 25 30
 Cys Met Ala Phe Asn Thr Ser Gly Met Leu Leu Val Thr Thr Asp Thr
 35 40 45
 Leu Gly His Asp Phe His Val Phe Gln Ile Leu Thr His Pro Trp Ser
 50 55 60
 Ser Ser Thr Glu Arg Arg Gln Arg
 65 70

<210> 3047
 <211> 391
 <212> DNA
 <213> Homo sapiens

<400> 3047

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 360
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<210> 3048
 <211> 122
 <212> PRT
 <213> Homo sapiens

<400> 3048
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 20 25 30
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 35 40 45
 Phe Leu Gln Asn Ala Lys Thr Leu Leu Lys Lys Ile Ser Glu Ala Ser
 50 55 60
 Lys Ala Phe Gln Met Glu Lys Ile Glu His Gly Tyr Glu Asn Met Asn
 65 70 75 80
 His Phe Thr Val Asn Leu Asn Arg Glu Glu Lys Ile Ile Arg Glu Ile
 85 90 95
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 <211> 599
 <212> DNA
 <213> Homo sapiens

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<210> 3050

<211> 177

<212> PRT

<213> Homo sapiens

<400> 3050

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			20					25					30		
Thr	Ile	Lys	Glu	Glu	Lys	Ser	Ile	Leu	Tyr	Leu	Glu	Gly	Ser	Ala	Leu
		35					40					45			
Val	Phe	Glu	Asp	Ile	Phe	Arg	Leu	Ile	Ala	Phe	Tyr	Cys	Val	Ser	Arg
		50				55				60					
Asp	Leu	Leu	Pro	Phe	Thr	Leu	Arg	Leu	Pro	Gln	Ala	Ile	Leu	Glu	Ala
65					70					75				80	
Ser	Ser	Phe	Thr	Asp	Leu	Glu	Thr	Ile	Ala	Asn	Leu	Gly	Leu	Gly	Phe
			85					90					95		
Trp	Asp	Ser	Ser	Leu	Asn	Pro	Pro	Gln	Glu	Arg	Gly	Lys	Pro	Ala	Glu
			100					105					110		
Pro	Pro	Arg	Asp	Arg	Ala	Pro	Gly	Phe	Pro	Leu	Val	Ser	Ser	Leu	Arg
		115					120					125			
Pro	Thr	Ala	His	Asp	Ala	Asn	Cys	Ala	Cys	Glu	Ile	Glu	Leu	Ser	Val
		130				135					140				
Gly	Asn	Asp	Arg	Leu	Trp	Phe	Val	Asn	Pro	Ile	Phe	Ile	Glu	Asp	Cys
145				150					155					160	
Ser	Ser	Ala	Leu	Pro	Thr	Asp	Gln	Pro	Pro	Leu	Gly	Asn	Cys	Pro	Ser
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Arg

<210> 3051

<211> 820

<212> DNA

<213> Homo sapiens

<400> 3051

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<210> 3052
 <211> 62
 <212> PRT
 <213> Homo sapiens

<400> 3052
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 Gly Thr Pro Ser Ser Ala Thr Val Ala Gln Gln Ala Ser Ser Ser Pro
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 35 40 45
 Thr Ser His Pro Ser Ser Pro Lys Cys Gly Val Ser Pro Leu
 50 55 60

<210> 3053
 <211> 2625
 <212> DNA
 <213> Homo sapiens

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<211> 417

<212> PRT

<213> Homo sapiens

<400> 3054

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			20				25				30				
Thr	Val	Lys	Asp	Gly	Leu	Ser	Leu	Gln	Phe	Lys	Arg	Phe	Arg	Glu	Thr
	35						40				45				
Val	Pro	Thr	Trp	Asp	Thr	Ile	Arg	Asp	Glu	Glu	Asp	Val	Leu	Asp	Glu
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Leu	Leu	Gln	Tyr	Leu	Gly	Val	Thr	Ser	Pro	Glu	Cys	Leu	Gln	Arg	Thr
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			85					90						95	
Lys	Gln	Glu	Asn	Asp	Val	Ile	Asn	Ala	Ile	Leu	Lys	Gln	His	Thr	Glu
			100					105						110	
Glu	Lys	Glu	Phe	Val	Glu	Lys	His	Phe	Asn	Asp	Leu	Asn	Met	Lys	Ala
	115						120					125			
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	130					135					140				
Tyr	Cys	Arg	Leu	Leu	Leu	Ser	Ile	Leu	Gly	Met	Asn	Ser	Trp	Asp	Lys
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Arg	Arg	Ser	Phe	His	Leu	Leu	Lys	Lys	Asn	Glu	Lys	Leu	Leu	Arg	Glu
			165					170						175	
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      210      215      220
Trp Glu Val Asn Leu Thr Asn His Cys Gly Phe Met Gly Gly Leu Gln
      225      230      235      240
Lys Asn Lys Ser Thr Gly Leu Thr Thr Pro Tyr Phe Ala Thr Ser Thr
      245      250      255
Val Glu Val Ile Phe His Val Ser Thr Arg Met Pro Ser Asp Ser Asp
      260      265      270
Asp Ser Leu Thr Lys Lys Leu Arg His Leu Gly Asn Asp Glu Val His
      275      280      285
Ile Val Trp Ser Glu His Thr Arg Asp Tyr Arg Arg Gly Ile Ile Pro
      290      295      300
Thr Glu Phe Gly Asp Val Leu Ile Val Ile Tyr Pro Met Lys Asn His
      305      310      315      320
Met Phe Ser Ile Gln Ile Met Lys Lys Pro Glu Val Pro Phe Phe Gly
      325      330      335
Pro Leu Phe Asp Gly Ala Ile Val Asn Gly Lys Val Leu Pro Ile Met
      340      345      350
Val Arg Ala Thr Ala Ile Asn Ala Ser Arg Ala Leu Lys Ser Leu Ile
      355      360      365
Pro Leu Tyr Gln Asn Phe Tyr Glu Glu Arg Ala Arg Tyr Leu Gln Thr
      370      375      380
Ile Val Gln His His Leu Glu Pro Thr Thr Phe Glu Asp Phe Ala Ala
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<210> 3055

<211> 905

<212> DNA

<213> Homo sapiens

<400> 3055

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<210> 3056

<211> 195

<212> PRT

<213> Homo sapiens

<400> 3056

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Cys	Leu	Thr	Asn	Tyr	Gly	His	Cys	Asn	Tyr	Val	Ser	Gly	Lys	His	Ala
			20					25					30		
Cys	Ile	Phe	Tyr	Asp	Glu	Asn	Thr	Lys	His	Tyr	Glu	Leu	Leu	Asn	Tyr
		35					40					45			
Ser	Glu	His	Gly	Thr	Thr	Val	Asp	Asn	Val	Leu	Tyr	Ser	Cys	Asp	Phe
		50				55					60				
Ser	Glu	Lys	Thr	Pro	Pro	Thr	Pro	Pro	Ser	Ser	Ile	Val	Ala	Lys	Val
65					70					75				80	
Gln	Ser	Val	Ile	Arg	Arg	Arg	Arg	His	Gln	Lys	Gln	Asp	Glu	Glu	Pro
			85						90					95	
Ser	Glu	Glu	Ala	Ala	Met	Met	Ser	Ser	Gln	Ala	Gln	Gly	Pro	Gln	Arg
			100					105					110		
Arg	Pro	Cys	Asn	Cys	Lys	Ala	Ser	Ser	Ser	Ser	Leu	Ile	Gly	Gly	Ser
		115					120					125			
Gly	Ala	Gly	Trp	Glu	Gly	Thr	Ala	Leu	Leu	His	His	Gly	Ser	Tyr	Ile
		130				135					140				
Lys	Leu	Gly	Cys	Leu	Gln	Phe	Val	Phe	Ser	Ile	Thr	Glu	Phe	Ala	Thr
145					150					155				160	
Lys	Gln	Pro	Lys	Gly	Asp	Ala	Ser	Leu	Leu	Gln	Asp	Gly	Val	Leu	Ala
			165						170					175	
Glu	Lys	Leu	Ser	Leu	Lys	Pro	His	Gln	Gly	Pro	Val	Leu	Arg	Ser	Asn
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Ser	Val	Pro													
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<210> 3057

<211> 2169

<212> DNA

<213> Homo sapiens

<400> 3057
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360
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420
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600
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720
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 2169

<210> 3058

<211> 298

<212> PRT

<213> Homo sapiens

<400> 3058

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Ser	Val	Arg	Tyr	Cys	Ile	Lys	Ala	Thr	Leu	His	Arg	Pro	Trp	Val	Pro
		20						25					30		
Ala	Arg	Arg	Ala	Arg	Lys	Val	Phe	Thr	Val	Ile	Glu	Pro	Val	Asp	Ile
		35				40						45			
Asn	Thr	Pro	Ala	Leu	Leu	Ala	Pro	Gln	Ala	Gly	Ala	Arg	Glu	Lys	Val
		50				55					60				
Ala	Arg	Ser	Trp	Tyr	Cys	Asn	Arg	Gly	Leu	Val	Ser	Leu	Ser	Ala	Lys
65					70				75					80	
Ile	Asp	Arg	Lys	Gly	Tyr	Thr	Pro	Gly	Glu	Val	Ile	Pro	Val	Phe	Ala
			85						90					95	
Glu	Ile	Asp	Asn	Gly	Ser	Thr	Arg	Pro	Val	Leu	Pro	Arg	Ala	Ala	Val
			100					105					110		
Val	Gln	Thr	Gln	Thr	Phe	Met	Ala	Arg	Gly	Ala	Arg	Lys	Gln	Lys	Arg
		115					120					125			
Ala	Val	Val	Ala	Ser	Leu	Ala	Glu	Pro	Val	Gly	Pro	Gly	Gln	Arg	
		130				135				140					
Ala	Leu	Trp	Gln	Gly	Arg	Ala	Leu	Arg	Ile	Pro	Pro	Val	Gly	Pro	Ser
145					150				155					160	
Ile	Leu	His	Cys	Arg	Val	Leu	His	Val	Asp	Tyr	Ala	Leu	Lys	Val	Cys
			165						170					175	
Val	Asp	Ile	Pro	Gly	Thr	Ser	Lys	Leu	Leu	Leu	Glu	Leu	Pro	Leu	Val
			180					185					190		
Ile	Gly	Thr	Ile	Pro	Leu	His	Pro	Phe	Gly	Ser	Arg	Ser	Ser	Ser	Val

195					200					205					
Gly	Ser	His	Ala	Ser	Phe	Leu	Leu	Asp	Trp	Arg	Leu	Gly	Ala	Leu	Pro
210					215					220					
Glu	Arg	Pro	Glu	Ala	Pro	Pro	Glu	Tyr	Ser	Glu	Val	Val	Ala	Asp	Thr
225					230					235					
Glu	Glu	Ala	Ala	Leu	Gly	Gln	Ser	Pro	Phe	Pro	Leu	Pro	Gln	Asp	Pro
245					250					255					
Asp	Met	Ser	Leu	Glu	Gly	Pro	Phe	Phe	Ala	Tyr	Ile	Gln	Glu	Phe	Arg
260					265					270					
Tyr	Arg	Pro	Pro	Pro	Leu	Tyr	Ser	Glu	Glu	Asp	Pro	Asn	Pro	Leu	Leu
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<210> 3059

<211> 1411

<212> DNA

<213> Homo sapiens

<400> 3059

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120	cccaaaaggtc	tggaccacaga	aatgggacgt	cggtcatcag	atactgaaga
180	agcaagagaa	aaaagaaaca	ccgtagacgg	tctctctcga	gcagttcttc
240	acatacagcc	gaaagaaagg	aggaaggaaa	tcaagatcaa	agtcaagatc
300	gatcttcagc	ctcgttcaca	ttcttatgat	agaagacgca	ggcatcgatc
360	tcttcttatg	gctccagaag	gaaacgaagt	cgaagtcgtt	caaggggtcg
420	tatatagttc	agaggtctag	gtcaaaaagc	agaacaagaa	ggtccaggtc
480	ctcgttctc	atagtcgtag	cagtgaagg	tccagtcaca	gaagaacgcg
540	cgggatagag	aacgacgtaa	gggcagagat	aaagagaaaa	gagaaaagga
600	gggaaggaca	aggaattaca	taacatcaaa	cgtgggggaat	ctggaaacat
660	ttagaacatc	tgccaccagc	tgaacaggcc	aaagccagac	tacagctggt
720	gctgcaaaag	ctgatgaagc	attgaaagcc	aaagaaagaa	atgaggaaga
780	agaaaggagg	aagaccaagc	caccctggta	gaacaagtaa	aaagagtaaa
840	gctattgaaa	gtgattcttt	tgttcagcag	acattcagat	caagtaaaaga
900	tcagtggaa	ctagtgaagt	gaaacaagca	acttcaacat	caggaccagc
960	gctgatccac	ccagtactga	aaaagaaata	gacccctacca	gcacccctac
1020					

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<210> 3060

<211> 334

<212> PRT

<213> Homo sapiens

<400> 3060

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Lys	Lys	Lys	His	Arg	Arg	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asp	Ser
			20					25					30		
Arg	Thr	Tyr	Ser	Arg	Lys	Lys	Gly	Gly	Arg	Lys	Ser	Arg	Ser	Lys	Ser
	35						40					45			
Arg	Ser	Trp	Ser	Arg	Asp	Leu	Gln	Pro	Arg	Ser	His	Ser	Tyr	Asp	Arg
	50				55						60				
Arg	Arg	Arg	His	Arg	Ser	Ser	Ser	Ser	Ser	Ser	Tyr	Gly	Ser	Arg	Arg
65					70					75				80	
Lys	Arg	Ser	Arg	Ser	Arg	Ser	Arg	Gly	Arg	Gly	Lys	Ser	Tyr	Arg	Val
			85					90						95	
Gln	Arg	Ser	Arg	Ser	Lys	Ser	Arg	Thr	Arg	Arg	Ser	Arg	Ser	Arg	Pro
			100					105						110	
Arg	Leu	Arg	Ser	His	Ser	Arg	Ser	Ser	Glu	Arg	Ser	Ser	His	Arg	Arg
	115						120					125			
Thr	Arg	Ser	Arg	Ser	Arg	Asp	Arg	Glu	Arg	Arg	Lys	Gly	Arg	Asp	Lys
	130					135					140				
Glu	Lys	Arg	Glu	Lys	Glu	Lys	Asp	Lys	Gly	Lys	Asp	Lys	Glu	Leu	His
145					150					155				160	
Asn	Ile	Lys	Arg	Gly	Glu	Ser	Gly	Asn	Ile	Lys	Ala	Gly	Leu	Glu	His
			165					170						175	
Leu	Pro	Pro	Ala	Glu	Gln	Ala	Lys	Ala	Arg	Leu	Gln	Leu	Val	Leu	Glu
			180					185						190	
Ala	Ala	Ala	Lys	Ala	Asp	Glu	Ala	Leu	Lys	Ala	Lys	Glu	Arg	Asn	Glu
	195						200					205			
Glu	Glu	Ala	Lys	Arg	Arg	Lys	Glu	Glu	Asp	Gln	Ala	Thr	Leu	Val	Glu
	210					215					220				
Gln	Val	Lys	Arg	Val	Lys	Glu	Ile	Glu	Ala	Ile	Glu	Ser	Asp	Ser	Phe
225					230					235				240	
Val	Gln	Gln	Thr	Phe	Arg	Ser	Ser	Lys	Glu	Val	Lys	Lys	Ser	Val	Glu
			245						250					255	
Pro	Ser	Glu	Val	Lys	Gln	Ala	Thr	Ser	Thr	Ser	Gly	Pro	Ala	Ser	Ala

	260		265		270										
Val	Ala	Asp	Pro	Pro	Ser	Thr	Glu	Lys	Glu	Ile	Asp	Pro	Thr	Ser	Ile
	275						280					285			
Pro	Thr	Ala	Ile	Lys	Tyr	Gln	Asp	Asp	Asn	Ser	Leu	Ala	His	Pro	Asn
	290					295					300				
Leu	Phe	Ile	Glu	Lys	Ala	Asp	Ala	Glu	Glu	Lys	Trp	Phe	Lys	Arg	Leu
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<210> 3061

<211> 1554

<212> DNA

<213> Homo sapiens

<400> 3061

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180
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240
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<210> 3062

<211> 146

<212> PRT

<213> Homo sapiens

<400> 3062

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Phe	Lys	Met	Leu	Gln	Glu	Asn	Arg	Glu	Gly	Arg	Ala	Ala	Pro	Arg	Gln
			20					25					30		
Ser	Ser	Ser	Phe	Arg	Leu	Leu	Gln	Glu	Ala	Leu	Glu	Ala	Glu	Glu	Arg
			35				40					45			
Gly	Gly	Thr	Pro	Ala	Phe	Leu	Pro	Ser	Ser	Leu	Ser	Pro	Gln	Ser	Ser
			50			55					60				
Leu	Pro	Ala	Ser	Arg	Ala	Leu	Ala	Thr	Pro	Pro	Lys	Leu	His	Thr	Cys
					70					75				80	
Glu	Lys	Cys	Ser	Thr	Ser	Ile	Ala	Asn	Gln	Ala	Val	Arg	Ile	Gln	Glu
					85				90					95	
Gly	Arg	Tyr	Arg	His	Pro	Gly	Cys	Tyr	Thr	Cys	Ala	Asp	Cys	Gly	Leu
				100				105					110		
Asn	Leu	Lys	Met	Arg	Gly	His	Phe	Trp	Val	Gly	Asp	Glu	Leu	Tyr	Cys
			115				120					125			
Glu	Lys	His	Ala	Arg	Gln	Arg	Tyr	Ser	Ala	Pro	Ala	Thr	Leu	Ser	Ser
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145															

<210> 3063

<211> 386

<212> DNA

<213> Homo sapiens

<400> 3063

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 180

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<210> 3064

<211> 128

<212> PRT

<213> Homo sapiens

<400> 3064

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Ser	Gly	Asp	Arg	Lys	Arg	Ala	Ile	Ser	Ser	Val	Cys	Thr	Tyr	Ile
			20					25				30		
Tyr	Gln	Cys	Ser	Arg	Pro	Ala	Pro	Leu	His	Ser	Arg	Asp	Leu	His
			35					40				45		
Met	Ile	Val	Ala	Ala	Phe	Gln	Cys	Leu	Cys	Val	Trp	Leu	Thr	Glu
			50				55				60			
Pro	Asp	Met	Leu	Asp	Glu	Lys	Asp	Tyr	Leu	Lys	Glu	Val	Leu	Glu
					70					75				80
Val	Glu	Leu	Gly	Ile	Ser	Gly	Ser	Lys	Ser	Lys	Asn	Asn	Glu	Gln
				85					90				95	
Val	Lys	Tyr	Lys	Gly	Asp	Lys	Glu	Pro	Asn	Pro	Ala	Ser	Met	Arg
			100					105				110		
Lys	Asp	Ala	Ala	Glu	Ala	Thr	Leu	Thr	Trp	Tyr	Gly	Ser	Asp	Arg
			115				120					125		

<210> 3065

<211> 2104

<212> DNA

<213> Homo sapiens

<400> 3065

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1440
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<210> 3070

<211> 153

<212> PRT

<213> Homo sapiens

<400> 3070

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      20           25           30
Leu Gly Ser Ser Val Leu His Trp Gly Tyr Leu Pro Ser Lys Asp Asp
      35           40           45
Tyr Phe Gln Val Leu Cys Val Ala Asp Val Val Ile Ser Thr Ala Lys
      50           55           60
His Glu Phe Phe Gly Val Ala Met Leu Glu Ala Val Tyr Cys Gly Cys
      65           70           75           80
Tyr Pro Leu Cys Pro Lys Asp Leu Val Tyr Pro Glu Ile Phe Pro Ala
      85           90           95
Glu Tyr Leu Tyr Ser Thr Pro Glu Gln Leu Ser Lys Arg Leu Gln Asn
      100          105          110
Phe Cys Lys Arg Pro Asp Ile Ile Arg Lys His Leu Tyr Lys Gly Glu
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Ile Ala Pro Phe Ser Trp Ala Ala Leu His Gly Lys Phe Arg Ser Leu
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<210> 3071

<211> 3343

<212> DNA

<213> Homo sapiens

<400> 3071

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780

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<210> 3072

<211> 349

<212> PRT

<213> Homo sapiens

<400> 3072

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		20						25					30		
Lys	Glu	Ser	Arg	Gly	Leu	Arg	Gln	Gln	Gly	Thr	Ser	Val	Ala	Gln	Ser
		35					40					45			
Gly	Ala	Gln	Ala	Pro	Gly	Arg	Ala	His	Arg	Cys	Ala	His	Cys	Arg	Arg
	50					55				60					
His	Phe	Pro	Gly	Trp	Val	Ala	Leu	Trp	Leu	His	Thr	Arg	Arg	Cys	Gln
65					70				75					80	
Ala	Arg	Leu	Pro	Leu	Pro	Cys	Pro	Glu	Cys	Gly	Arg	Arg	Phe	Arg	His
			85					90					95		
Ala	Pro	Phe	Leu	Ala	Leu	His	Arg	Gln	Val	His	Ala	Ala	Ala	Thr	Pro
			100					105					110		
Asp	Leu	Gly	Phe	Ala	Cys	His	Leu	Cys	Gly	Gln	Ser	Phe	Arg	Gly	Trp

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Val Ala Leu Val Leu His Leu Arg Ala His Ser Ala Ala Lys Arg Pro
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Ile Ala Cys Pro Lys Cys Glu Arg Arg Phe Trp Arg Arg Lys Gln Leu
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Arg Ala His Leu Arg Arg Cys His Pro Pro Ala Pro Glu Ala Arg Pro
      165              170              175
Phe Ile Cys Gly Asn Cys Gly Arg Ser Phe Ala Gln Trp Asp Gln Leu
      180              185              190
Val Ala His Lys Arg Val His Val Ala Glu Ala Leu Glu Glu Ala Ala
      195              200              205
Ala Lys Ala Leu Gly Pro Arg Pro Arg Gly Arg Pro Ala Val Thr Ala
      210              215              220
Pro Arg Pro Gly Gly Asp Ala Val Asp Arg Pro Phe Gln Cys Ala Cys
      225              230              235              240
Cys Gly Lys Arg Phe Arg His Lys Pro Asn Leu Ile Ala His Arg Arg
      245              250              255
Val His Thr Gly Glu Arg Pro His Gln Cys Pro Glu Cys Gly Lys Arg
      260              265              270
Phe Thr Asn Lys Pro Tyr Leu Thr Ser His Arg Arg Ile His Thr Gly
      275              280              285
Glu Lys Pro Tyr Pro Cys Lys Glu Cys Gly Arg Arg Phe Arg His Lys
      290              295              300
Pro Asn Leu Leu Ser His Ser Lys Ile His Xaa Ser Asp Pro Arg Gly
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Arg Pro Arg Pro Pro Pro Ala Arg Gly Ala Pro Ser Cys Gln Pro Ala
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<210> 3073

<211> 791

<212> DNA

<213> Homo sapiens

<400> 3073

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<210> 3074

<211> 263

<212> PRT

<213> Homo sapiens

<400> 3074

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		20					25					30			
Ser	Cys	Glu	Phe	Leu	Leu	Ala	Gly	Ala	Gly	Gly	Ala	Gly	Ala	Gly	Ala
		35				40					45				
Ala	Pro	Gly	Pro	His	Leu	Pro	Pro	Arg	Gly	Ser	Val	Pro	Gly	Asp	Pro
	50				55						60				
Val	Arg	Ile	His	Cys	Asn	Ile	Thr	Glu	Ser	Tyr	Pro	Ala	Val	Pro	Pro
65				70					75					80	
Ile	Trp	Ser	Val	Glu	Ser	Asp	Asp	Pro	Asn	Leu	Ala	Ala	Val	Leu	Glu
			85					90					95		
Arg	Leu	Val	Asp	Ile	Lys	Lys	Gly	Asn	Thr	Leu	Leu	Leu	Gln	His	Leu
			100				105						110		
Lys	Arg	Ile	Ile	Ser	Asp	Leu	Cys	Lys	Leu	Tyr	Asn	Leu	Pro	Gln	His
	115					120					125				
Pro	Asp	Val	Glu	Met	Leu	Asp	Gln	Pro	Leu	Pro	Ala	Glu	Gln	Cys	Thr
	130				135						140				
Gln	Glu	Asp	Val	Ser	Ser	Glu	Asp	Glu	Asp	Glu	Glu	Met	Pro	Glu	Asp
145				150					155					160	
Thr	Glu	Asp	Leu	Asp	His	Tyr	Glu	Met	Lys	Glu	Glu	Glu	Pro	Ala	Glu
			165					170					175		
Gly	Lys	Lys	Ser	Glu	Asp	Asp	Gly	Ile	Gly	Lys	Glu	Asn	Leu	Ala	Ile
		180					185						190		
Leu	Glu	Lys	Ile	Lys	Lys	Asn	Gln	Arg	Gln	Asp	Tyr	Leu	Asn	Gly	Ala
	195					200					205				
Val	Ser	Gly	Ser	Val	Gln	Ala	Thr	Asp	Arg	Leu	Met	Lys	Glu	Leu	Gln
	210				215						220				
Gly	Tyr	Ile	Thr	Xaa	Ser	Gln	Ser	Phe	Lys	Gly	Gly	Asn	Tyr	Xaa	Ser
225				230					235					240	
Ser	Asn	Ser	Trp	Asn	Asp	Ser	Leu	Tyr	Gly	Trp	Asp	Val	Gln	Leu	Leu
			245					250					255		
Lys	Val	Asp	Gln	Gly	Ser	Val									
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<210> 3075

<211> 603

<212> DNA

<213> Homo sapiens

<400> 3075

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<210> 3076

<211> 201

<212> PRT

<213> Homo sapiens

<400> 3076

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20          25          30
Val Gly Pro Gln Lys Lys Lys Lys Lys Lys Lys Val Leu Gly Gly
35          40          45
Gly Arg Phe Gly Gln Val His Arg Cys Thr Glu Lys Ser Thr Gly Leu
50          55          60
Ala Leu Ala Ala Lys Ile Ile Lys Val Lys Asn Val Lys Asp Arg Glu
65          70          75          80
Asp Val Lys Asn Glu Val Asn Ile Met Asn Gln Leu Ser His Val Asn
85          90          95
Leu Ile Gln Leu Tyr Asp Ala Phe Glu Ser Lys Ser Ser Phe Thr Leu
100         105         110
Ile Met Glu Tyr Val Asp Gly Gly Glu Leu Phe Asp Arg Ile Thr Asp
115         120         125
Glu Lys Tyr His Leu Thr Glu Leu Asp Val Val Leu Phe Thr Arg Gln
130         135         140
Ile Cys Glu Gly Val His Tyr Leu His Gln His Tyr Ile Leu His Leu
145         150         155         160
Asp Leu Lys Pro Glu Asn Ile Leu Cys Val Ser Gln Thr Gly His Gln

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<210> 3078

<211> 310

<212> PRT

<213> Homo sapiens

<400> 3078

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		20					25					30			
Val	Gly	Ala	Leu	Pro	Arg	Gly	Pro	Arg	Gln	Asn	Ser	Arg	Leu	Gly	Leu
	35					40					45				
Pro	Leu	Leu	Leu	Met	Pro	Glu	Glu	Ala	Arg	Leu	Leu	Ala	Glu	Ile	Gly
	50				55					60					
Ala	Val	Thr	Leu	Val	Ser	Ala	Pro	Arg	Pro	Asp	Ser	Arg	His	His	Ser
65				70					75				80		
Leu	Ala	Leu	Thr	Ser	Phe	Lys	Arg	Gln	Gln	Glu	Glu	Ser	Phe	Gln	Glu
			85					90					95		
Gln	Ser	Ala	Leu	Ala	Ala	Glu	Ala	Arg	Glu	Thr	Arg	Arg	Gln	Glu	Leu
		100					105					110			
Leu	Glu	Lys	Ile	Thr	Glu	Gly	Gln	Ala	Ala	Lys	Lys	Gln	Lys	Leu	Glu
	115					120						125			
Gln	Ala	Ser	Gly	Ala	Ser	Ser	Ser	Gln	Glu	Ala	Gly	Ser	Ser	Gln	Ala
	130				135						140				
Ala	Lys	Glu	Asp	Glu	Thr	Ser	Asp	Gly	Gln	Ala	Ser	Gly	Glu	Gln	Glu
145				150					155					160	
Glu	Ala	Gly	Pro	Ser	Ser	Ser	Gln	Ala	Gly	Pro	Ser	Asn	Gly	Val	Ala
			165					170					175		
Pro	Leu	Pro	Arg	Ser	Ala	Leu	Leu	Val	Gln	Leu	Ala	Thr	Ala	Arg	Pro
	180						185					190			
Arg	Pro	Val	Lys	Ala	Arg	Pro	Leu	Asp	Trp	Arg	Val	Gln	Ser	Lys	Asp
	195					200					205				
Trp	Pro	His	Ala	Gly	Arg	Pro	Ala	His	Glu	Leu	Arg	Tyr	Ser	Ile	Tyr
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225			230						235					240	
Gly	Gly	Asp	Phe	Leu	Val	Tyr	Pro	Gly	Asp	Pro	Leu	Arg	Phe	His	Ala
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His	Tyr	Ile	Ala	Gln	Cys	Trp	Ala	Pro	Glu	Asp	Thr	Ile	Pro	Leu	Gln
	260						265					270			
Asp	Leu	Val	Ala	Ala	Gly	Arg	Leu	Gly	Thr	Ser	Val	Arg	Lys	Thr	Leu
	275					280						285			
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<210> 3079

<211> 1785

<212> DNA

<213> Homo sapiens

<400> 3079

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<210> 3080

<211> 500

<212> PRT

<213> Homo sapiens

<400> 3080

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Pro	Ala	Glu	Glu	Glu	Val	Ala	Thr	Gly	Thr	Thr	Ser	Ala	Ser	Asp	Asp	50	55	60	
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 Ala Ala Leu Ser Lys His Ala Asn Val Lys Ile Phe Ser Glu Lys Leu
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 Leu Leu Leu Leu Asn Arg Gly Asp Asp Pro Val Arg Ile Phe Lys His
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 Gly Ser Pro Ala Thr Ala Ala Ile Phe Tyr His Thr Asp Met Met Ala
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 420 425 430
 Lys Gly Pro Phe Gly Ala Gly Gln Arg Pro Trp Pro Gly Val Pro Arg
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 Leu Leu Glu Pro Gly Ser Thr Pro Ser Arg Glu Pro His Pro Val Glu
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 Arg Ser Gly Val Pro Ala Leu Thr Ser Ser Trp Ala Ser Gly Cys Pro
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<210> 3081

<211> 1902

<212> DNA

<213> Homo sapiens

<400> 3081

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<211> 414

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<213> Homo sapiens

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